

From: Hal Bergsma [<mailto:hbergsma@thprd.org>]
Sent: Wednesday, November 27, 2013 11:39 AM
To: Leigh Crabtree
Subject: Farmington Road Improvements

Hi Leigh,

Based on my review of the plans and the application materials it appears that construction work would be occurring at the southwest corner of Farmington and Menlo. That location is subject to a Contaminated Media Management Plan (CMMP) prepared for THPRD and approved by DEQ earlier this year. My understanding is that a copy was provided to the city, but I'm not sure who received it. (Barbara was copied on a letter to me from DEQ dated Nov. 1, 2013 regarding their Conditional No Further Action Determination and Certificate of Completion Farmington Texaco (Former) site.)

I can send you a PDF of the CMMP if you don't have it, but it essentially requires that any ground disturbing work on the property or within the adjacent ROW shall not occur until the location and depth of excavation work is compared to a figure in the report showing the locations where contaminated soil may be encountered. As a result of remediation, levels of contamination are low, but construction workers need to be adequately trained by the contractor in safety procedures to avoid risk if they do work in locations that may continue to have some level of contamination. I suggest a condition of approval addressing this issue.

The plans also indicate that the county will need to obtain a temporary construction easement from us, which must be granted by our Board of Directors. (The plan sheet also indicates they will need to acquire additional ROW. I assume they will negotiate with us to set a price for that.)

Let me know if you need additional information. Have a happy Thanksgiving!

Hal Bergsma
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***Contaminated Media Management Plan
THPRD Farmington Road Texaco Cleanup
Beaverton, Oregon***

**Prepared for:
Tualatin Hills Park and Recreation District**

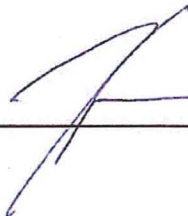
**June 21, 2013
1937-00**




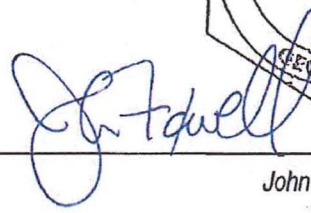
***Contaminated Media Management Plan
THPRD Farmington Road Texaco Cleanup
Beaverton, Oregon***

**Prepared for:
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**June 21, 2013
1937-00**



Herb Clough, P.E.
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Table of Contents

1.0 INTRODUCTION	1
1.1 Purpose and Use.....	1
1.2 Limitations	1
1.3 Regulatory Framework	1
2.0 BACKGROUND	2
2.1 Site Location and Description.....	2
2.2 Geology and Hydrogeology	3
2.3 Environmental Conditions.....	3
3.0 CONTAMINATED MEDIA MANAGEMENT	6
3.1 Work Activity Review	7
3.2 Soil and Groundwater Handling.....	9
3.3 Final Disposition of Soil and Groundwater.....	11
3.4 Reporting	11
4.0 HEALTH AND SAFETY TRAINING AND PLANNING	13
5.0 REFERENCES	15

Figures

- 1 Site Location Map
- 2 Site Vicinity Plan
- 3 Removal Summary
- 4 Surface Soil Results Summary
- 5 Subsurface Soil Results Summary
- 6 TPH-G, Benzene, and Naphthalene in Groundwater and Storm Water
- 7 CMMP Summary

Appendices

- A Current Data Set
- B Soil Profile Information and Disposal Permit

1.0 Introduction

This contaminated media management plan (CMMP) has been prepared for use at the Former Farmington Road Texaco (DEQ LUST 34-91-0083 and ECSI 5546) located at 13660 SW Farmington Road, Beaverton, Oregon (the Site; Figure 1). The Site is now owned by the Tualatin Hills Parks and Recreation District (THPRD). The CMMP, together with the 2012 Removal Action and deed restrictions implemented during the property transaction, fulfills the requirements of the DEQ's Record of Decision (ROD) dated May 4, 2012 (DEQ, 2012).

1.1 Purpose and Use

The purpose of this CMMP is to summarize procedures for appropriate management of soil and groundwater at the Site that may contain chemicals above certain screening levels. This CMMP provides:

- Identification of soil and groundwater management areas that require appropriate handling of these media;
- Information needed to properly handle contaminated media within the identified management areas during future Site activities; and
- Information needed to make informed decisions regarding the health and safety of Site workers.

1.2 Limitations

The scope of this CMMP is intended to address the identification and proper handling of soil or groundwater that does or may contain chemicals above certain screening levels, and provide the information that is needed for workers to plan for health and safety. This CMMP is not intended to provide health and safety recommendations for the protection of Site workers or construction personnel. Persons involved in construction activities or Site operations that could result in exposure to Site soil or groundwater shall be familiar with the content of this CMMP, but should have a Health and Safety Plan (HASP) prepared specific to the work.

1.3 Regulatory Framework

The following describes the regulatory framework for remedial action at the Site:

- A Phase II Environmental Site Assessment and an Analysis of Brownfield Cleanup Alternatives (ABCA; Ash Creek, 2011) were prepared for the Site.
- The Oregon Department of Environmental Quality (DEQ) selected a final remedy as documented in the Record of Decision (ROD) published May 4, 2012 (DEQ, 2012).
- A soil and groundwater corrective action was completed in 2012 (Ash Creek, 2013).

This CMMP was prepared and represents one of the requirements of the ROD.

2.0 Background

2.1 Site Location and Description

The Site is located at 13660 Farmington Road in Beaverton, Oregon (Figure 1, Figure 2). It is a 30,000-square-foot vacant lot. North of the Site are commercial buildings, south and west of the Site is Eichler Park, and east of the Site is an engineered stormwater facility. The vicinity of the Site generally consists of commercial buildings and residential housing. The Site is covered by grass, except for a paved pedestrian path along the north side of the Site. THPRD intends to incorporate this parcel into the adjacent Eichler Park.

The site has approximately 125 feet of frontage on Farmington Road. A utility corridor runs along Farmington Road, along the north side of the Site (Figure 3). The utility corridor includes gas, communications, water, stormwater and other utilities at depths of 5 to 10 feet deep. The property line for the north portion of the Site extends approximately 5 feet farther north than the property lines for adjacent parcels. The City of Beaverton is contemplating a future capital improvement project that would align the right of way with the adjacent parcels; however no definite plans have been made. Because of the intensity of utilities and possible excavation work in the portion of the Site that fronts Farmington Road, and significantly contaminated soils that were present in this area, a Removal Action (Ash Creek, 2013a) was completed in 2012 to remove contaminated soils within areas most likely to be excavated in the future, and to minimize the potential for migration of contaminants to the adjacent storm sewer system and Beaverton Creek.

The removal action removed contaminated soils to a depth of approximately 11 feet along the north portion of the Site as shown on Figure 3, and removed contaminated soils to a depth of 4 feet at the location of the former fuel island. This removal action resulted in:

- 1) Removal of known petroleum hydrocarbon contamination located within the first three feet of soil at the site (referred to as the surface soil zone) that exceeded certain cleanup levels; and
- 2) Removal of heavily contaminated soil within the Farmington Road frontage that exceeded certain cleanup levels that, if not excavated, would require a specially trained environmental contractor to complete excavation in this area.

2.2 Geology and Hydrogeology

2.2.1 Soil Conditions

Subsurface soils in the areas explored consist of low-permeability silt, with disturbed areas in the vicinity of the former underground storage tank (UST) cavity and gravel backfill within the former groundwater interceptor trench. The native materials are consistent with the undifferentiated valley fill deposits that occur in this area and extend to bedrock. At approximately 13 feet, the silt unit is underlain by fine sand. Depth to bedrock is expected to occur at depths of approximately 1,000 feet below ground surface (bgs).

Within the area of the 2012 removal action, backfill materials consist of low permeability silt from the base of the excavation to approximately 5 feet. The remainder of the excavation was backfilled with ¾-inch minus crushed rock.

2.2.2 Groundwater Conditions

Groundwater is observed in open excavations at approximately 10 feet bgs. Groundwater occurs under confining pressure. So in wells or exploratory borings, water levels are measured at a depth of approximately 5 feet bgs. Excavation was completed at the site to a depth of 10 feet without the need for excavation dewatering. The predominant groundwater flow direction in the summer months is to the north and to the northeast and north-northeast during other times of the year.

2.2.3 Surface Water Conditions

The nearest surface water body is a tributary to Beaverton Creek located northeast of the Site. Near the Site, the tributary is present as a closed culvert and a recently constructed storm water facility/constructed wetland. A 48-inch storm sewer line runs north-northeast from near the Site, crossing SW Farmington Road, where it joins the Beaverton Creek tributary culvert. From that junction, the storm water is confined to an underground closed storm sewer system. Based on observations during the 2009 work by the City of Beaverton, the storm sewer is bedded in a crushed gravel backfill. Groundwater is only periodically in contact with the east storm sewer along SW Menlo Drive, and has historically not been in contact with the storm sewer along Farmington Road.

2.3 Environmental Conditions

Petroleum hydrocarbons (gasoline, diesel, and oil) and constituents of these products (Volatile Organic Compounds [VOCs] and polycyclic aromatic hydrocarbons [PAHs]) are the primary contaminants at the Site. To a lesser extent, arsenic is also present in association with the former waste oil tank. The data set for the soil, groundwater, storm water, and outdoor air sampling data from the ABCA and removal action is included in Appendix A. Soil samples removed as a result of the removal action have been omitted from the data set.

2.3.1 Extent of Petroleum Hydrocarbons in Soil

Based on the environmental investigations and remediation conducted at this site, concentrations of residual petroleum hydrocarbons and/or related compounds remain in surface and subsurface soil. These concentrations do not exceed certain levels that are protective of long term risks to an excavation or construction worker, except at the former waste oil tank. Concentrations of arsenic detected in the area of the waste oil tank at depths from 9 to 10 feet bgs exceed certain levels that are protective of long term risks to a construction worker. Concentrations of heavy oil range petroleum hydrocarbons may also exceed these same construction worker risk levels. When the ABCA (Ash Creek, 2011) was prepared, concentrations of heavy oil range TPH at the former waste oil tank were below all levels that are considered protective of a construction worker. After the ABCA was prepared, DEQ revised their risk based concentrations for TPH to concentrations that were significantly lower than the RBCs used in the ABCA. The evaluation process for heavy oil range TPH requires additional analysis and site-specific evaluation. This process was not completed at the ABCA stage because detected concentrations were below all available RBCs. In consideration of this data gap, the heavy oil range hydrocarbons in the 5 to 10 foot interval at the former waste oil tank area are conservatively assumed to exceed protective levels for construction workers.

Figure 4 summarizes concentrations of petroleum hydrocarbons in surface soil remaining after the 2012 removal action. Figure 5 summarizes concentrations of petroleum hydrocarbons in subsurface soil following the 2012 removal action and the area where arsenic, and possibly heavy oil range TPH, are present above a construction worker cleanup level.

Relative to other soil and groundwater concentrations, the highest Site concentrations of petroleum hydrocarbons in soil remain within the former UST cavity. Based on the results of the Removal Action (Ash Creek, 2013), subsurface contamination is also present in the sidewalls of the excavation adjacent to Farmington Road and Menlo Drive. Concentrations of petroleum hydrocarbons are below certain concentrations that are considered protective of excavation and construction workers. The area in the vicinity of the former waste oil tank is the only location where concentrations (arsenic in this case) exceed an applicable cleanup level – in this case, construction worker contact with soil.

2.3.2 Extent of Petroleum Hydrocarbons in Groundwater

Petroleum hydrocarbons are present in groundwater across the site and localized migration of petroleum hydrocarbons follow the groundwater gradient, extending approximately 50 feet east-northeast into SW Farmington Road at the intersection with SW Menlo Drive. Historically, petroleum hydrocarbons were detected across Menlo Drive in former monitoring well MW-4. Petroleum hydrocarbons have not been detected in MW-4 since 1995. Petroleum hydrocarbons were not observed in groundwater during the 2009 City of Beaverton soil management trenching activities conducted in the area immediately off the Northeast corner of the site.

Based upon the groundwater data from 2009 and 2010, combined with historical Site assessment information, the extent of petroleum hydrocarbons in groundwater is estimated to be approximately 50 feet north of the Site beneath SW Farmington Road, not more than 20 feet into SW Menlo Drive to the east, in the vicinity of PP-12 to the south, and just west of the former service station (Figure 6). The concentrations on Figure 6 show groundwater concentrations in areas where soil contamination was removed by the 2012 removal action, as well as concentrations in other locations. Concentrations of petroleum hydrocarbons in groundwater exceed excavation worker cleanup levels in the vicinity of the former UST nest.

2.3.3 Extent of Petroleum Hydrocarbons in Surface Water

The ABCA, including the results of the 2010 storm water evaluation, construction observations during work off the Northeast corner of the site in 2009, and the historical remediation activities provide several lines of evidence that surface water bodies are not affected by petroleum hydrocarbons and transport of petroleum hydrocarbons to the Beaverton Creek tributary by groundwater flow or within the storm sewer is not occurring.

- The 2010 storm water evaluation concludes petroleum related VOCs are not in the east storm sewer line (Figure 6) and that groundwater does not rise high enough to contact the north storm sewer line.
- Historical monitoring data collected between 1995 and 2003 from former MW-4 and MW-5, located downgradient of the Site near the Beaverton Creek tributary, have mostly not had detectable concentrations of petroleum VOCs or TPH-Dx. Historically, only four detections of VOCs (either toluene or xylene) were reported in MW-4 and MW-5, with the last detections observed in May, 1997. Each of these detected concentrations is just above the laboratory reporting limit.
- Multiple observations within trenches for the 48-inch storm sewer line, located off the Northeast corner of the Site did not indicate petroleum hydrocarbons were present; no positive PID readings, odors, or sheens were observed.
- In 1991, boring B-5 was completed across the street near where a sheen was initially reported to be present in the Beaverton Creek tributary. No record of sampling was provided, but boring was reported as "clean."

While the storm sewer and surface waters at the site are not currently affected by site contamination, prior to the 2012 removal action, concentrations of petroleum hydrocarbons in groundwater were present immediately adjacent to the storm sewer system. By removing the contaminated soils located in close proximity to the storm sewer, the 2012 removal action has further reduced the potential that concentrations of petroleum hydrocarbons in groundwater could migrate to the storm sewer.

3.0 Contaminated Media Management

This CMMP was prepared to identify procedures for appropriate management of petroleum contaminated soil and groundwater that may be generated during maintenance, special projects, or redevelopment. These activities could include:

- Ground disturbing maintenance;
- Ground disturbing utility work within the Farmington Road right-of-way conducted by THPRD, utilities, or municipalities;
- Ground disturbing work during redevelopment; and
- Construction required groundwater containment and management.

Figure 7 shows the soil and groundwater management areas. The soil management area was defined as the lateral extent of soil where petroleum hydrocarbons have been detected in soil. The groundwater management area was defined as anywhere that petroleum hydrocarbons have been detected in Site groundwater. The requirements of this plan shall apply to soil and groundwater within these management areas.

Additionally, two focused management areas - the former waste oil tank and former UST nest have been established (Figure 7). Additional requirements apply to work completed in these areas, described as follows.

Former Waste Oil UST. The area in the vicinity of the former waste oil tank has heavy oil and arsenic concentrations that exceed construction worker cleanup levels. For future construction work that encounters soil intervals where heavy oil range petroleum hydrocarbons and arsenic are present (5 to 10 feet bgs), an environmental contractor with health and safety training would be required.

Former UST Nest. The area corresponding to the former UST nest and vicinity comprise the second focused management area. Concentrations of petroleum hydrocarbons in groundwater within this area exceed excavation worker cleanup levels. Consequently, any work conducted that exposes groundwater and requires activities where workers could contact groundwater (e.g., formwork where water can be contacted, excavation dewatering) must be conducted by an environmental contractor with health and safety training.

The management procedures in this CMMP are largely focused towards maintenance and utility work. Should a project be contemplated that would require excavation of large volumes of soil or pumping large volumes of groundwater, professional assistance is recommended to develop a waste management strategy that is consistent with this CMMP.

The remainder of this section discusses management requirements related to chemicals in the Site soil and groundwater. Information related to health and safety considerations is discussed in Section 4. These health and safety considerations are in addition to requirements that may be imposed on construction projects under federal, state, or local regulations.

Soil and groundwater management steps described in this CMMP include:

- 1) Complete Work Activity Review in accordance with Section 3.1.
- 2) Handle soil and groundwater in accordance with the requirements in Section 3.2.
- 3) Dispose of excavated soil or pumped groundwater in accordance with the requirements of Section 3.3.
- 4) Prepare and file a report in accordance with Section 3.4.

3.1 Work Activity Review

Soil and groundwater management areas are shown on Figure 7. Work within these areas can reasonably be expected to contact contaminated soil or groundwater. The work activity review step includes comparing the location, extent, and depth of planned excavation activities to the map of management areas on Figure 7.

Note that as the owner of the property, THPRD must disclose the existence of contaminated soils to any THPRD site worker or contract worker that may potentially encounter contaminated soils.

3.1.1 Surface Soil Excavation

Prior to initiating any excavation within the surface soil unit, THPRD staff should compare the location of the excavation work to Figure 7 to identify whether contaminated soil management is required. Neither of the focused management areas (requiring a trained contractor) is located within the surface soil interval.

Work completed within the first three feet of soil for landscaping, fencing, or other incidental excavation can be completed without characterization prior to construction and without the need for specially trained contractors.

Because petroleum hydrocarbons may be present within the surface soil interval (the first three feet of soil), but at concentrations that are below certain screening levels, soils that are excavated and not used at the same location on the site must be managed as described later in this section. The area that comprised the southern half of the former fuel island is the area where workers could most likely encounter petroleum hydrocarbons in surface soil. It is the only known area where petroleum hydrocarbons were detected in

surface soil, but that is not currently covered with asphalt concrete. THPRD staff should be prepared to encounter petroleum hydrocarbons anywhere within the soil management area.

3.1.2 Subsurface Soil

Prior to initiating any excavation within the surface soil unit, THPRD staff should compare the location of the excavation work to Figure 7 to identify whether contaminated soil management may be required. Petroleum hydrocarbons are present within subsurface soil (below three feet deep) at the site. The detected concentrations of petroleum hydrocarbons are below screening levels that are protective of excavation and construction workers. At the former waste oil tank, arsenic was detected above screening levels protective of construction workers. The subsurface soil interval is the most likely area that future workers could come in contact with contaminated soils. The highest remaining concentrations of petroleum hydrocarbons, relative to other locations on site, are located in the vicinity of the former UST nest.

Except for the waste oil tank area, work completed within the subsurface interval can be completed without characterization prior to construction and without the need for specially trained contractors. Deeper excavation within the subsurface interval will encounter greater quantities of impacted soil, which if not used at the same location and depth on the site, must be managed as described later in this section. Because larger quantities of impacted soil may be generated with deeper work, careful planning for waste management associated with subsurface projects should be undertaken, including budgeting for disposal costs.

Excavation work below depths of 5 feet deep in and around the former waste oil tank area requires a specially trained contractor. Excavation above 5 feet can be completed without a specially trained contractor, provided it does not disturb the contaminated soil interval located between 5 and 10 feet. In the unlikely event that future construction work exposes this area and the soils are removed, excavated soils would require disposal and follow up sampling.

3.1.3 Groundwater

Prior to initiating any excavation that could contact groundwater, THPRD staff should compare the location of the excavation work to Figure 7 to identify whether contaminated groundwater management procedures are required. Based on discussions with THPRD, it is unlikely that THPRD would complete excavation to depths that would contact groundwater. This CMMP addresses management of contaminated groundwater under three different scenarios, as follows.

Groundwater Focus Area. Within the groundwater focus area, any work at depth where groundwater is exposed and worker exposure could occur (e.g., utility work in trenches with water, formwork in trenches with water, pumping and handling contaminated groundwater) would likely require a contractor with health and safety training.

Groundwater Management Area. For work within the groundwater management area, outside of the UST nest focus area, work would not likely require a contractor with health and safety training.

Contingency Groundwater Management. Excavation dewatering that occurs outside the groundwater management area could potentially draw in contaminated groundwater from the site. Subsurface projects that occur within 25 to 50 feet of the groundwater management area should include contingency for groundwater management. Work outside of the groundwater management area would likely not require a contractor with health and safety training.

Groundwater treatment or disposal can result in significant effort and cost. If large excavations requiring dewatering may be completed, careful planning should be undertaken, including budgeting for treatment and disposal costs.

3.2 Soil and Groundwater Handling

3.2.1 Soil Handling

Soil excavated from the areas shown on Figure 7 can reasonably be expected to be contaminated and project planning should account for appropriate disposal of any excess soils that are generated during a project. When present, petroleum hydrocarbon concentrations are lowest in the first five feet of soil. In soil, concentrations of petroleum hydrocarbons are highest from between depths of 5 feet and 11 feet below ground.

Waste soil is defined as soil that is excavated and cannot be returned as backfill to the excavation in the same approximate location it was removed. The soil Waste Profile and Disposal Permit from Waste Management is included in Appendix B. For any contemplated soil disposal, Waste Management should be contacted prior to transport and provided the documents in Appendix B for acceptance of the excavated soil.

Handling considerations for surface and subsurface soil are described below.

Surface Soil (0 to 3 feet deep). Contaminated soils are most likely to occur within surface soil at the area of the former fuel island, but THPRD workers should be aware of the possibility that surface soil contamination could be present within other portions of the soil management area. Soils excavated within the surface interval for landscaping, irrigation piping, fencing, and other similar uses do not require disposal if all of the soil is returned to the excavation. For example, if shrubbery is planted and the soil removed from the excavation is completely used to backfill around the plant, there are no waste disposal requirements. If any amount of soil is not replaced, this soil must be containerized, characterized, and removed from the site for disposal or treatment following the procedures described in this section.

Subsurface Soil (3 to 6 feet deep). Similar to the procedures for surface soil, if contaminated subsurface soil is excavated, it is acceptable to return the soil to the same excavation. If contaminated soil is replaced in the excavation, it should be returned in the approximate order it was excavated (e.g., last out, first in), within the same area and depth interval it was excavated. Contaminated soil from the subsurface soil zone should never be used to backfill an excavation outside of the soil management area or used to backfill at depths of 3 feet or less. Any excess soil should be managed as described in this section.

3.2.2 Soil Management and Disposal

Proper temporary storage of any contaminated materials is required to prevent impacts to human health and the environment and prevent off-site transport of hazardous substances. The procedures in this section are in addition to the normal requirements for handling soil without chemicals and requirements of the City of Beaverton and/or Clean Water Services for erosion and sedimentation control.

Soil Excavation. Excavated soil that contains petroleum hydrocarbons shall be maintained within the limits of the excavation, stockpiled in accordance with this plan, or placed immediately into a waiting truck. During excavation, the soil shall be screened for evidence of contamination (e.g., stained soil, petroleum-like sheen, detections with VOC field instrument such as a photoionization detector [PID]). If observed, the soil with indications of contamination should be handled separately from other soil. This process segregates clean from contaminated soil and will limit disposal costs.

Stockpiling. Excavated soil that is not removed from the Site shall be placed in a covered roll-off box or in a stockpile. Smaller amounts of soil may be placed in drums. Stockpiles shall be maintained in a manner that prevents run-on, runoff, and erosion of the stockpiles. Stockpiles shall be placed on plastic sheeting with a berm around the perimeter of the stockpile. The berm may be constructed by laying the bottom plastic over straw bales, Jersey Barriers, ecology blocks, or by other equivalent methods. When not active, stockpiles shall be covered with plastic and secured with sand bags or equivalent. The soil shall remain in well-maintained stockpiles until removed from the site for treatment or disposal.

Loading and Hauling. Excavated soil may be loaded into trucks for hauling to a disposal facility or a temporary stockpile. During loading, care shall be taken to minimize spillage of soil on the exterior of the trucks or clean ground surface. Any soil on the truck exterior shall be removed prior to leaving the loading area. The trucks shall be covered with a tarp prior to departing the Site. Trucks shall not be allowed to leave the Site if liquids are present or draining from the load. In these cases, a paint filter test should be performed to verify free liquids will not drain from the load. Excavated soil shall be transported in accordance with appropriate Department of Transportation (DOT) regulations.

3.2.3 Groundwater Handling

Water generated during construction dewatering within or near the groundwater management areas as described in Section 3.1.3 may contain chemicals above allowable discharge levels. This water would likely be unsuitable for discharge to storm sewers or surface water without treatment. Any water that is pumped from the groundwater management area must be contained in a tank. There are two options for handling water that has been contained following dewatering activities.

- Obtain a water discharge permit from Clean Water Services, sample and treat the recovered groundwater with carbon filtration or other treatment technology, and discharge to the storm or sanitary sewer system under the conditions of the permit.
- Transport the recovered groundwater to a permitted treatment facility.

3.3 Final Disposition of Soil and Groundwater

Unless evaluated by an environmental professional, assume soils excavated from the management area should be disposed at a permitted landfill. A soil disposal permit previously exists for Waste Management (Appendix B). The information in Appendix B should be provided to Waste Management, or this report should be provided to another permitted landfill as part of a new soil disposal profile.

Groundwater that is pumped from within the areas described in Section 3.1.3 should be taken for treatment at a permitted facility for treatment or discharged under a water discharge permit from Clean Water Services. This will require testing to verify compliance with disposal or discharge requirements.

Disposal receipts and profile documentation from landfills and treatment facilities should be maintained in a file with THPRD.

As described previously, the management procedures are largely focused towards maintenance and utility work. Should a project be contemplated that would require excavation of large volumes of soil or pumping large volumes of groundwater, professional assistance is recommended to develop a waste management strategy that is cost effective and meets the goals of your project.

3.4 Reporting

There are two levels of reporting required under this CMMP: (1) DEQ notification for projects other than THPRD maintenance projects; and (2) post disposal follow-up documentation when contaminated soils or waters are generated by THPRD.

3.4.1 DEQ Notifications

Notification of ground disturbing activity where contaminated soils or groundwater have or might be encountered should be provided to DEQ. The purpose of this notification is for DEQ to be aware of the particular activity for community relations purposes. For planned events, notification should be made to DEQ 72 hours prior to the activity. For unexpected discoveries, notification should occur at the time of discovery. Notification can be provided by email or telephone to either of the two parties listed below:

DEQ NW Region Brownfields Coordinator

(503) 229-5585 (o)

(503) 229-6899 (fax)

wells-albers.rebecca@deq.state.or.us

DEQ NW Region Duty Officer

(503)229-5263

The notification should include the following information:

- Reference notification to ECSI Site 5546 (DEQ's cleanup site identification number);
- Specific location of work;
- A summary of the work, purpose, location, and involved personnel; and
- Schedule for work.

3.4.2 Disposal Documentation

For any work where soil or groundwater disposal is required, a brief letter report should be prepared presenting the location of excavation activities, the nature of the work, results of sampling and analysis (if completed), and soil and/or groundwater disposition. At a minimum, the letter report shall include:

- A summary of the work completed, including purpose, location, and involved personnel;
- A scaled drawing or Site plan showing sample and excavation locations;
- Summary tables of analytical results (if samples collected);
- Discussion of field observations and results;
- Documentation of quantities and final disposition of soil and/or groundwater;
- Copies of soil/groundwater disposal receipts, if applicable; and
- Analytical laboratory reports.

Copies of the disposal documentation should be mailed to DEQ. THPRD, as the property owner, should maintain a file with each summary report of excavation work at the site. The DEQ documentation copies should be mailed to:

ECSI Site 5546 File
DEQ Northwest Region
2020 SW 4th Avenue, Suite 400
Portland, OR 97201

4.0 Health and Safety Training and Planning

This section addresses health and safety and training in addition to that which is normally conducted for construction activities. Health and Safety is the responsibility of the contractor or party performing the work. This CMMP outlines that Health and Safety trained workers are required for subsurface work at the former waste oil UST and work that contacts groundwater in the vicinity of the former UST nest. This requirement is based on concentrations of arsenic or petroleum hydrocarbons above certain screening levels. Any party conducting work in the area should review the data in this CMMP and complete health and safety training as appropriate for protecting their workers. Minimum requirements for a party completing work in either of these areas are summarized below.

Training. Employees engaged in activities that include exposure to media containing chemicals above applicable risk-based health levels must be trained in accordance with 29 CFR 1910.120. Training is not required for work areas that have been characterized (prior to the work activities) and shown not to contain chemicals at concentrations above the unrestricted use criteria, or where a risk analysis demonstrates that the chemicals will not pose an unacceptable risk to the Site workers.

Health and Safety Plan. The party in charge of Site activities shall prepare and implement a HASP in accordance with Occupational Safety and Health Act (OSHA) requirements (i.e., 29 CFR 1910.120) and OARs. The HASP shall be prepared by a Certified Industrial Hygienist or a qualified safety professional with a minimum of 40 hours of OSHA HAZWOPER training. The HASP shall identify and address, but not be limited to, the physical and chemical hazards of the Site and the proposed activities. The HASP content shall, at a minimum, describe the following:

- Required personal protective equipment (PPE);
- Site safety supervisor;
- Action levels at which protection would be upgraded;
- Controls to be used to minimize worker exposure to hazardous substances;
- Exclusion, contamination reduction, and clean zones;

-
- Personnel decontamination procedures;
 - Route to hospital; and
 - Monitoring equipment to be employed.

5.0 References

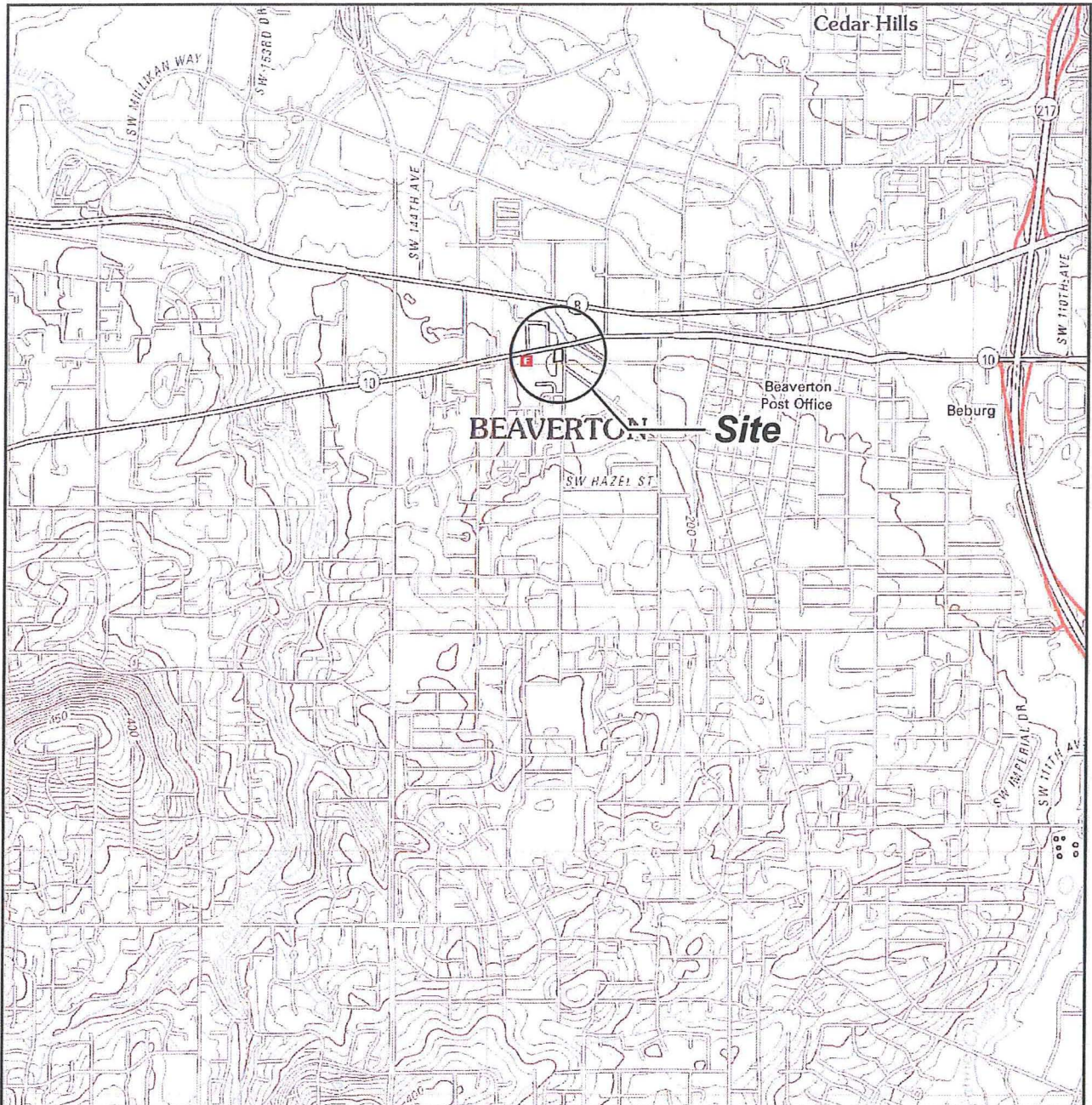
Ash Creek, 2011. Revised Analysis of Brownfields Cleanup Alternatives, Former Farmington Texaco, Beaverton, Oregon. March 11, 2011.

DEQ, 2012. Record of Decision; Selected Remedial Action for the Former Farmington Texaco Site; ECSI #5546; Beaverton, Oregon. May 4, 2011.

Ash Creek, 2013. Removal Action Report. THPRD Farmington Road Texaco Cleanup, Beaverton, Oregon. April 17, 2013.

DEQ, 2010. Human Health Risk Assessment Guidance, Oregon Department of Environmental Quality, October, 2010.

DEQ, 2003. Risk-Based Decision Making for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011). Oregon Department of Environmental Quality, September 22, 2003.



Note: Base map prepared from USGS 7.5-minute quadrangle of Beaverton, OR, dated 2011 as provided by USGS.gov.

0 2,000 4,000
Approximate Scale in Feet



Site Location Map Contaminated Media Management Plan 13660 Farmington Road Beaverton, Oregon



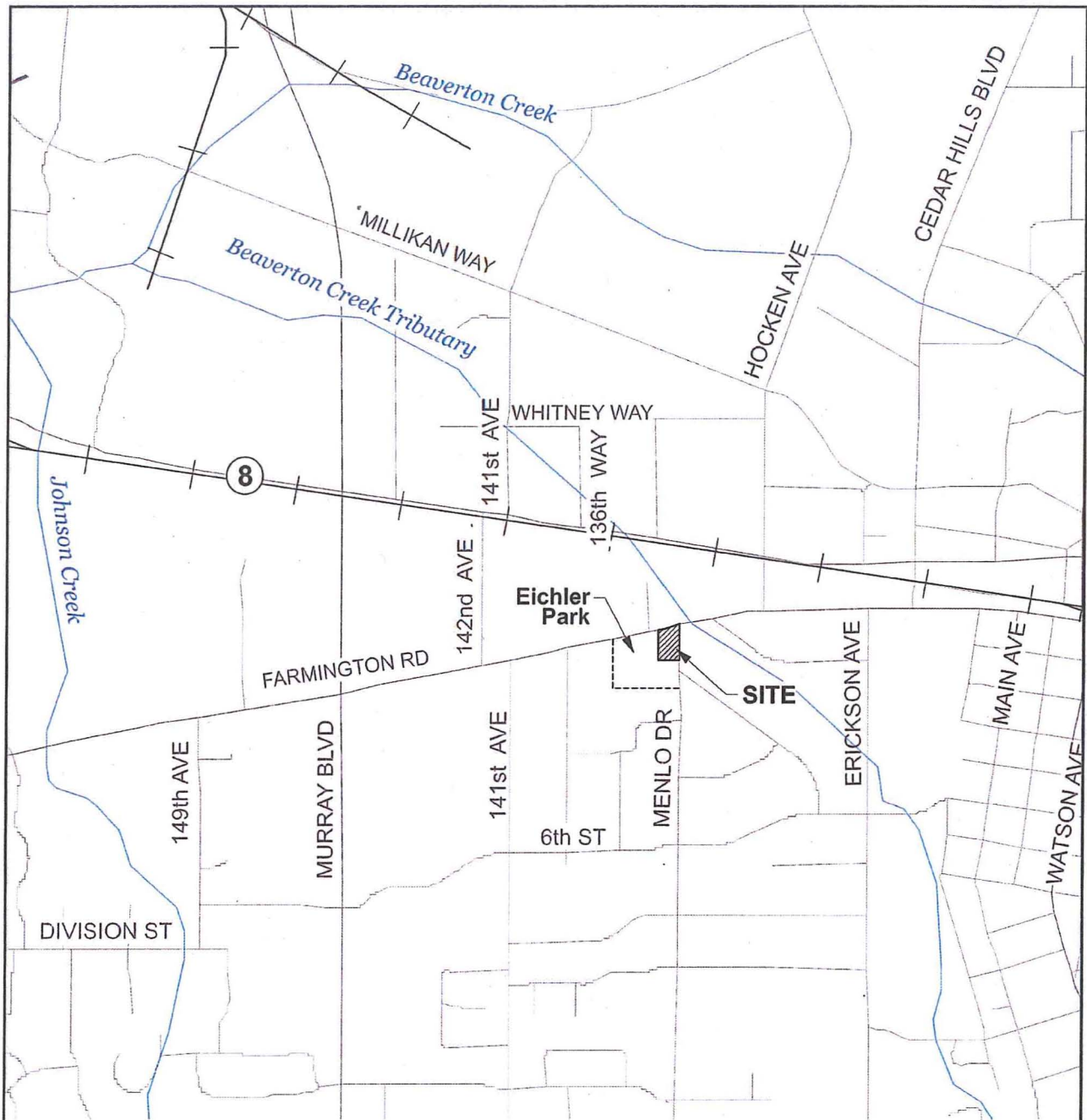
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number 1937-00

March 2013

Figure

1



0 1,000 2,000
Approximate Scale in Feet



NOTE: Base prepared from the Washington County GIS Map Basemap with Township & Range (April 30, 2007).

Site Vicinity Plan

Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon



Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

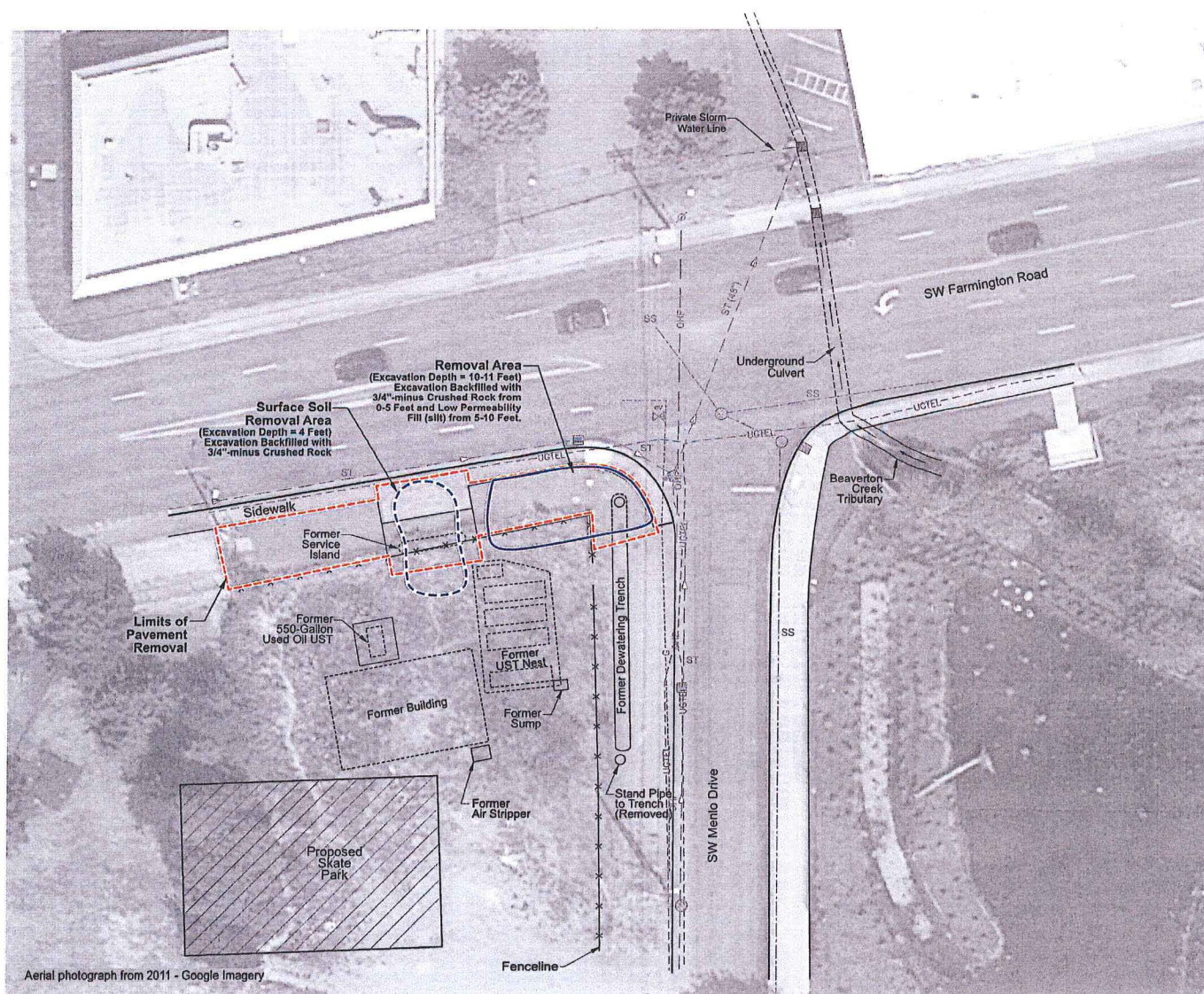
Project Number

1937-00

Figure

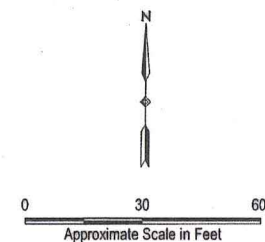
March 2013

2



Legend:

- UCTEL ----- Underground Telephone
- UGL ----- Underground Gas Line
- OHP ----- Overhead Power Line
- ST ----- Storm Water Line and Flow Direction
- SS ----- Sanitary Sewer Line
- Manhole
- Storm Drain



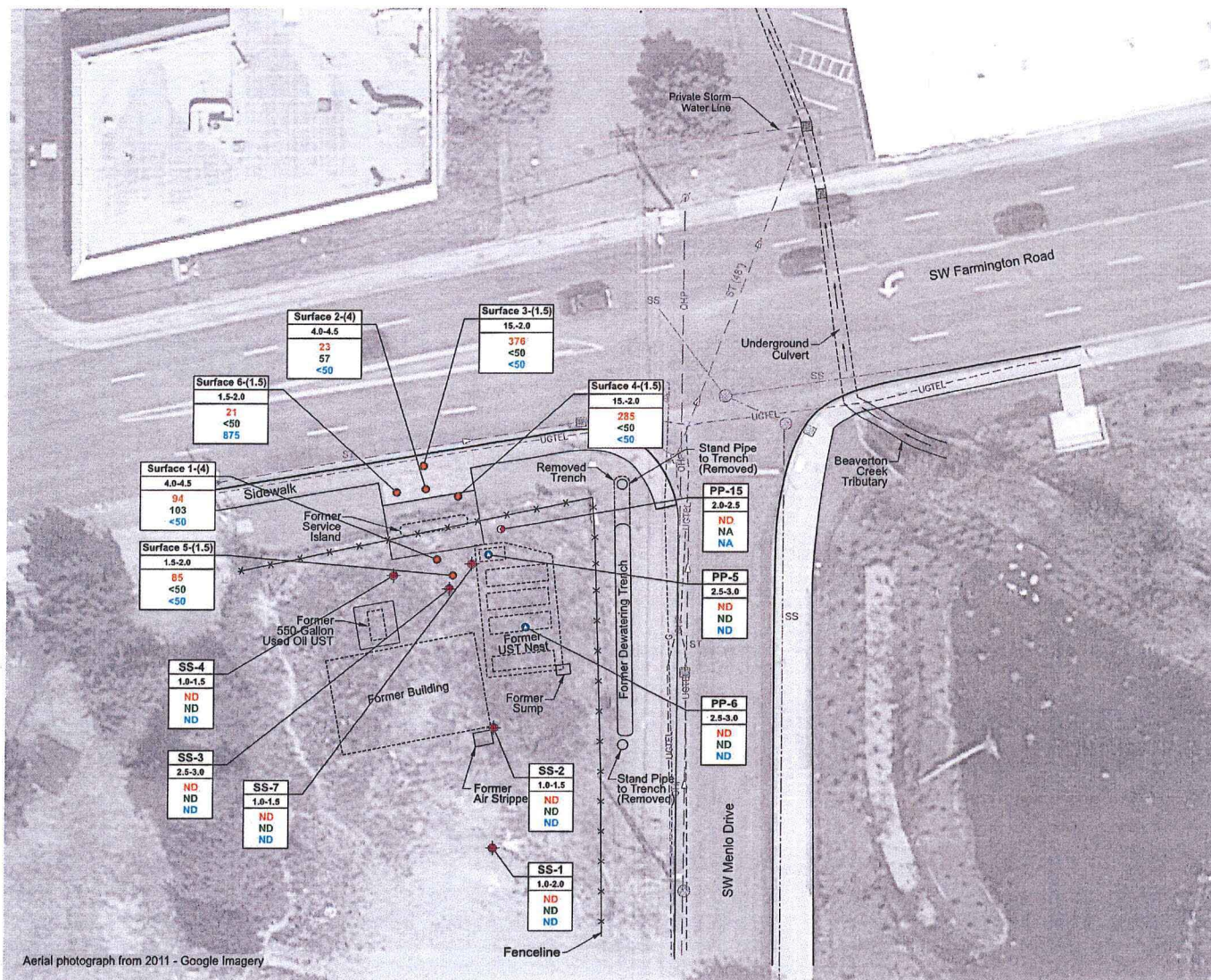
Removal Summary

Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon

APEX Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

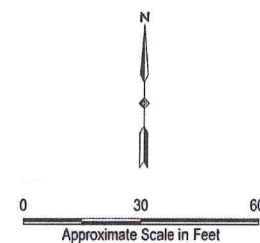
Project Number	1937-00
March 2013	

Figure	3
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Legend:

- Sample Identification
- Sample Interval in Feet
- Total Petroleum Hydrocarbons Gasoline-Range (TPH-G) Concentration in mg/kg
- Benzene Concentration in µg/kg
- Naphthalene Concentration in µg/kg
- NA = Not Analyzed
- ND = Not Detected
- Surface 4-(1.5) • Remedial Excavation Soil Sample Location and (Depth of Sample)
- SS-1 ♦ Surface Sample Location (Ash Creek 2010)
- PP-15 ♦ Subsurface Sample Location (Ash Creek 2010)
- ST - - - Storm Water Line and Flow Direction
- SS - - - Sanitary Sewer Line
- Manhole
- Storm Drain



Surface Soil Results Summary

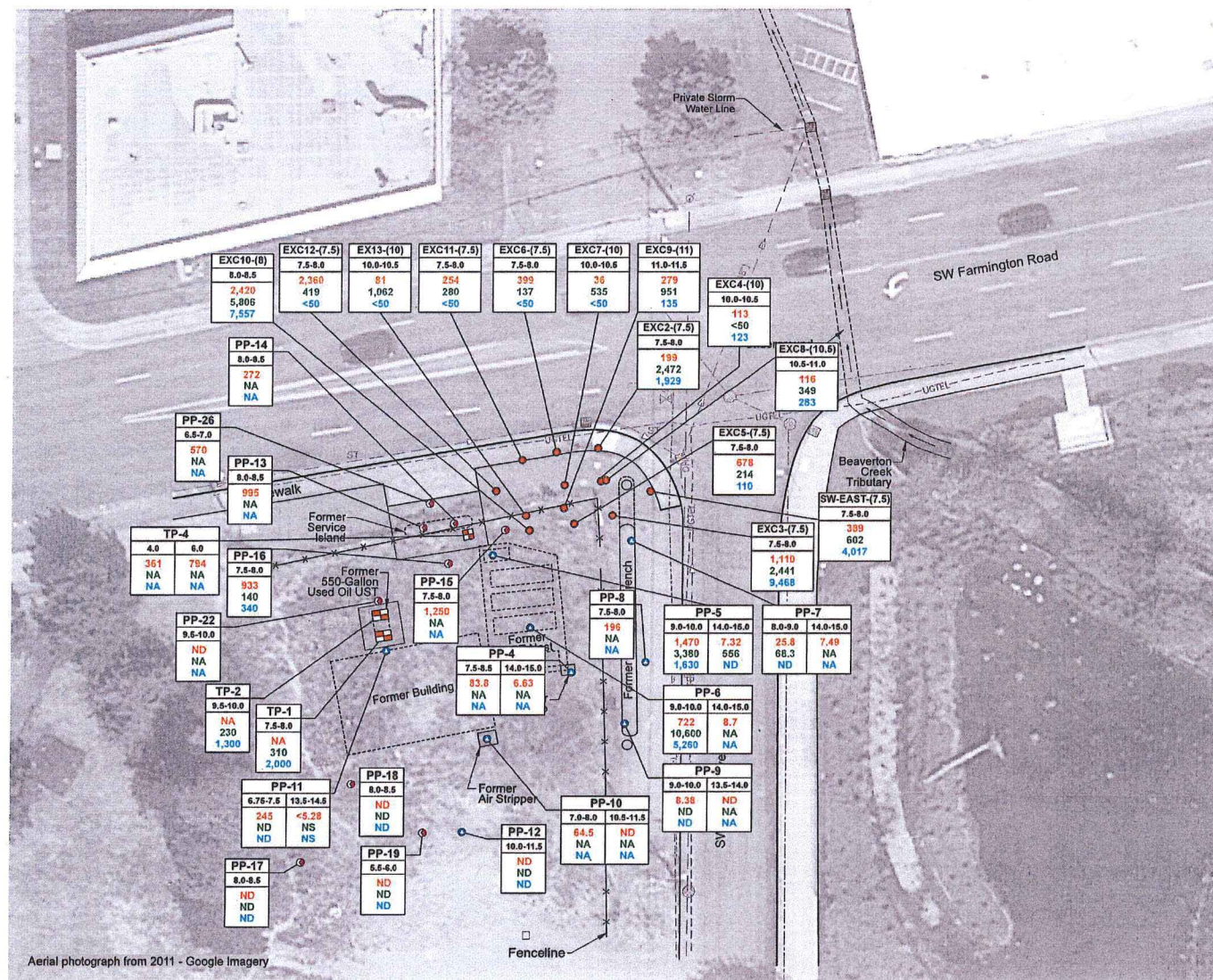
Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon

APEX
Apex Companies, LLC
3015 SW First Avenue
Portland, Oregon 97201

Project Number	1937-00
March 2013	

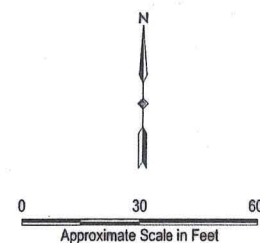
Figure	4
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Aerial photograph from 2011 - Google Imagery



Legend:

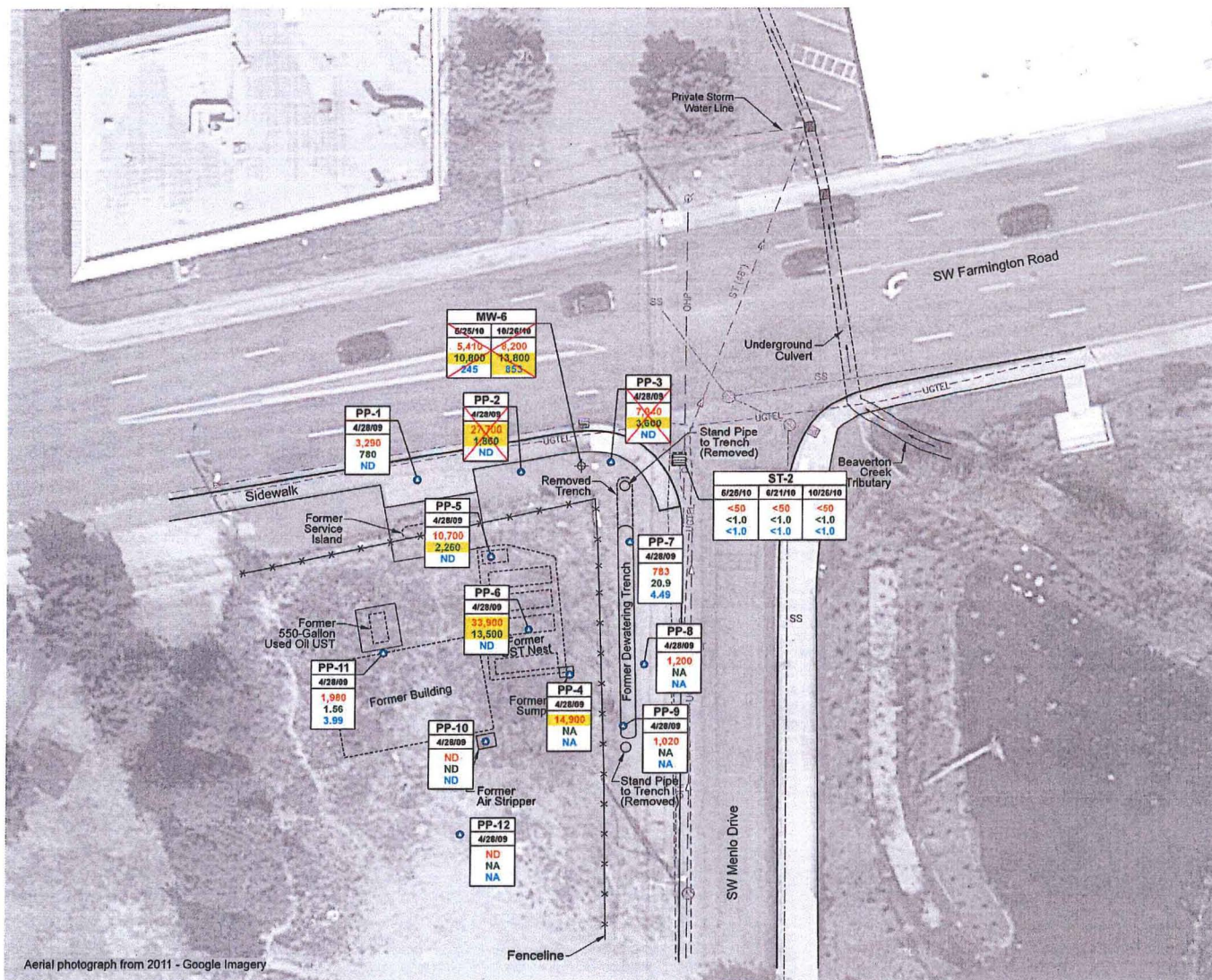
- Sample Identification
- Sample Interval in Feet
- Total Petroleum Hydrocarbons Gasoline-Range (TPH-G) Concentration in mg/kg
- Benzene Concentration in µg/kg
- Naphthalene Concentration in µg/kg
- NA = Not Analyzed
- ND = Not Detected
- Remedial Excavation Soil Sample Location and (Depth of Sample)
- Test Pit Location (Ash Creek 2010)
- Subsurface Sample Location (Ash Creek 2010)
- Exploration Location (Ash Creek 2009a)
- Storm Water Line and Flow Direction
- Sanitary Sewer Line
- Manhole
- Storm Drain



Subsurface Soil Results Summary

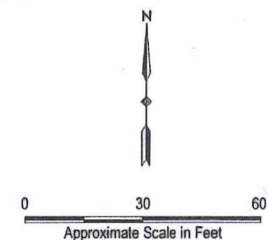
Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon

	Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1937-00	Figure	5
		March 2013			



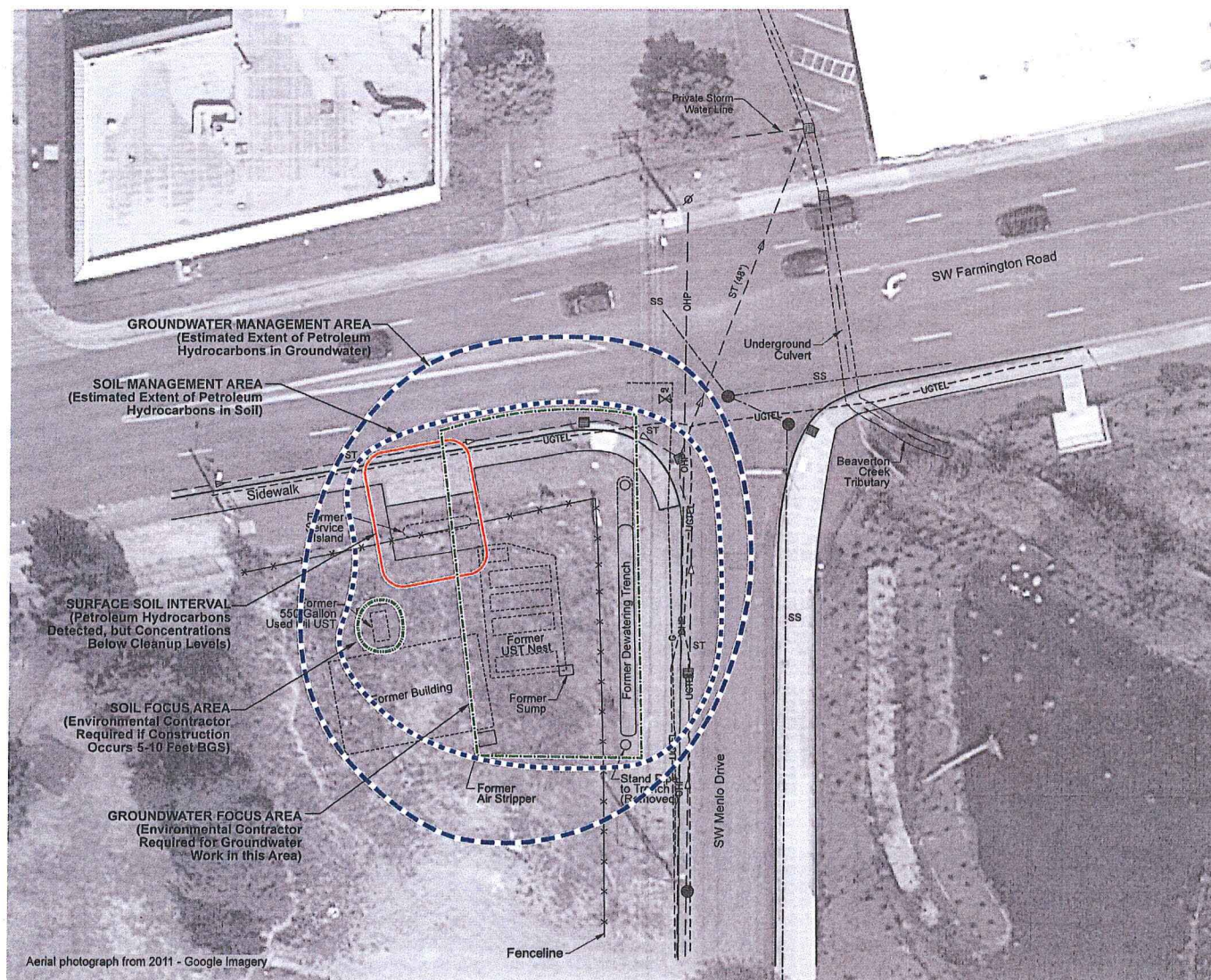
Legend:

- Sample Identification**
- | Sample | TPH-G (µg/L) | Benzene (µg/L) | Naphthalene (µg/L) |
|--------|--------------|----------------|--------------------|
| MW-6 | 5,410 | 10,800 | 245 |
| MW-6 | 8,200 | 13,800 | 853 |
- Highlighted Values Indicate Exceedance of Relevant DEQ Risk Based Concentration
- NA = Not Analyzed
ND = Not Detected
- X Indicates Sample Location Removed by 2012 Removal Action
- ST-2 Storm Water Sample Location (Ash Creek 2010)
- MW-1 Abandoned/Former Monitoring Well Location (Ash Creek 2010)
- PP-1 Exploration Location (Ash Creek 2009a)
- ST- Storm Water Line and Flow Direction
- SS- Sanitary Sewer Line
- Manhole
- Storm Drain



TPH-G, Benzene and Naphthalene in Groundwater and Storm Water
Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon

Aerial photograph from 2011 - Google Imagery

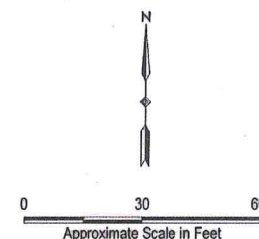


Legend:

- ST- - - -> Storm Water Line and Flow Direction
- SS- - - - Sanitary Sewer Line
- Manhole
- Storm Drain
- CMMP Applies to Work Within Area Represented by Contour
- Environmental Contractor Required Within Area Represented by Contour
- Petroleum Hydrocarbons Likely Encountered in this Area Represented by Contour (See Note 2)


Notes:

- 1) Soil and groundwater management using procedures in CMMP (Ash Creek 2013) applies for all excavation within soil and groundwater management area contours.
- 2) Surface soil interval is identified on this plan to alert workers that petroleum hydrocarbons have been detected in this area and would likely be encountered during work in this area. Detected concentrations of petroleum hydrocarbons are below cleanup levels in this area.



CMMP Summary

Contaminated Media Management Plan
13660 Farmington Road
Beaverton, Oregon

 Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number	1937-00	Figure
	March 2013		7

Appendix A

Historical Data Tables

Table A-1
TPH and Petroleum VOCs in Surface Soil
THPRD Farmington Road CMMF
Beaverton, Oregon

Sample ID	Area	Date	Sampling Interval	Gasoline	Diesel	Heavy Oil	TPH-G	TPH-D	TPH-Ho	Benzene	1,2-Dibromethane	1,2-Dichloroethane	Ethylbenzene	Isopropylbenzene	Methyl tert-butyl ether	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m,p-Xylene
				Concentrations in mg/kg (ppm)						Concentrations in µg/kg (ppb)												
PP-5	Former UST	5/4/2009	2.5-3	-	-	-	<4.73	-	-	<27	<135	<135	<135	<270	<135	<270	<135	<135	<135	<135	<135	<270
PP-6	Nest	5/4/2009	2.5-3	-	-	-	<5.41	-	-	<29.7	<148	<148	<148	<297	<148	<297	<148	-	<148	<148	<148	<297
PP-15 (2-2.5)	Fuel	5/11/2010	2-2.5	-	-	-	<8.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SS-3 (2.5-3)	Island/NE	11/4/2010	2.5-3	-	-	-	<7.5	-	-	<37	<75	<75	<75	<75	<75	<150	<75	<75	<75	<75	<75	<150
SS-4 (1-1.5)	Corner	11/4/2010	1-1.5	-	-	-	<8.7	-	-	<43	<87	<87	<87	<87	<87	<170	<87	<87	<87	<87	<87	<170
SS-7 (1-1.5)		11/4/2010	1-1.5	-	-	-	<8.5	-	-	<42	<85	<85	<85	<85	<85	<170	<85	<85	<85	<85	<85	<170
SS-1 (1-2)	Other	11/4/2010	1-2	-	-	-	<6.2	-	-	<31	<62	<62	<62	<62	<62	<120	<62	<62	<62	<62	<62	<120
SS-2 (1-1.5)		11/4/2010	1-1.5	-	-	-	<8.0	-	-	<40	<80	<80	<80	<80	<80	<160	<80	<80	<80	<80	<80	<160
Surface 4R (1.5)	2012	10/24/2012	1.5	-	-	-	285	38	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<100
Surface 6R (1.5)	Removal	10/24/2012	1.5	-	-	-	85	1,190	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<100
Surface 6R (1.5)	Samples	10/24/2012	1.5	-	-	-	81	<25	105	<50	<50	<50	<50	52	<50	875 F	146	<50	198	<50	<50	<100
Oregon DEQ Risk Based Concentrations (RBCs)							3,700	2,000	-	28,000	670	15,000	130,000	9,300,000	790,000	100,000	-	10,000,000	560,000	1,300,000	-	6,200,000
Surface Soil Ingestion, Dermal Contact, and Inhalation: Recreational							9,700	4,600	-	340,000	8,100	180,000	1,600,000	24,000,000	10,000,000	580,000	-	24,000,000	2,000,000	3,100,000	-	19,000,000
Soil Ingestion, Dermal Contact, and Inhalation: Construction Worker							>Max	>Max	-	9,500,000	230,000	5,000,000	44,000,000	670,000,000	290,000,000	16,000,000	-	680,000,000	54,000,000	86,000,000	-	540,000,000
Soil Volatilization to Outdoor Air: Recreational							42,000	>Max	-	61,000	1,100	24,000	250,000	>Csat	2,400,000	53,000	-	>Csat	700,000	>Max	-	>Csat

Notes:

1. Bold values indicates that analyte concentration exceeds one or more DEQ RBC value.
2. DUP = Duplicate.
3. HCID = Hydrocarbon Identification.
4. mg/kg (ppm) = Milligrams per kilogram (parts per million).
5. µg/kg (ppb) = Micrograms per kilogram (parts per billion).
6. DET = Analyte detected at or above the method reporting limit (MRL).
7. TPH = Total petroleum hydrocarbons.
8. VOCs = Volatile organic compounds.
9. RBC = Risk-Based Concentration from DEQ Risk-Based Decision Making for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011).
10. - = Not applicable or no RBC available.
11. < = Analyte not detected at or above the MRL.
12. > Max = RBC is in excess of 100,000 mg/kg. It is highly unlikely that such concentrations will ever be encountered.
13. >Csat = RBC exceeds saturation limit.
14. "F" = estimated value. Concentration detected above laboratory calibration.

Table A-2
TPH and Petroleum VOCs in Subsurface Soil
THPRD Farmington Road CMMP
Beaverton, Oregon

Sample ID	Area	Date	Sampling Interval	Gasoline	Diesel	Heavy Oil	TPH-G	TPH-D	TPH-Ho	Lead	Benzene	1,2-Dibromethane	1,2-Dichloroethane	Ethylbenzene	Isopropylbenzene	Methyl tert-butyl ether	Naphthalene	p-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	o-Xylene	m-p-Xylene	
Concentrations in mg/kg (ppm)																								
Concentrations in ug/kg (ppb)																								
EXC2	Remedial Excavations	10/12/2012	7.5	--	--	--	199	34	<100	--	2,472	<50	<50	3,048	162	<50	1,329	667	<50	118	363	<50	151	
EXC3		10/12/2012	7.5	--	--	--	1,110	178	<100	--	2,441	<50	<50	16,800	963	<50	9,468	7,072	<50	<50	133	<50	393	
EXC4		10/12/2012	10	--	--	--	113	54	<100	--	<50	<50	<50	<50	<50	<50	123	<50	<50	<50	<50	<50	<100	
EXC5		10/12/2012	7.5	--	--	--	678	2,830	<100	--	214	<50	<50	282	272	<50	110	3,344	<50	<50	98	<50	392	
EXC6		10/12/2012	7.5	--	--	--	399	274	<100	--	137	<50	<50	366	256	<50	<50	2,551	<50	<50	<50	<50	<100	
EXC7		10/12/2012	10	--	--	--	36	<25	<100	--	635	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<100	
EX8 (10.5)		10/16/2012	10.5	--	--	--	116	1,370	<100	--	349	<50	<50	210	77	<50	283	281	<50	388	265	<50	149	
EX9 (11)		10/16/2012	11	--	--	--	279	51	<100	--	951	<50	<50	555 F	633 F	<50	135	676 F	<50	<50	54	<50	153	
EX10 (8)		10/17/2012	8	--	--	--	2,420	2,210	<100	--	5,866	<50	<50	14,604	4,195	<50	7,557	22,300	<50	336	146	<50	635	
EX11 (7.5)		10/17/2012	7.5	--	--	--	254	1,110	<100	--	280	<50	<50	64	92	<50	<50	156	<50	<50	<50	<50	<100	
EX12 (7.5)	Former Fuel Island	10/17/2012	7.5	--	--	--	2,360	2,260	<100	--	419	<50	<50	371	404	<50	<50	2,812	<50	<50	<50	<50	<100	
EX13 (10)		10/18/2012	10	--	--	--	81	<25	<100	--	1,082	<50	<50	318	77	<50	<50	253	<50	<50	<50	<100		
SW-East-7.5		10/21/2012	7.5	--	--	--	389	<25	<100	--	602	<50	<50	9,649	254	<50	4,017	3,546	<50	<50	<50	<100		
PP-26 (6.5-7)		1/14/2010	6.5-7	--	--	--	570	3859	<101	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TP-4 (4)		8/17/2010	4	--	--	--	351	1,359	45.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
TP-4 (0)		8/17/2010	6	--	--	--	794	755	22.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-13		5/11/2010	8-8.5	--	--	--	995	2,960	49.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-14		5/11/2010	8-8.5	--	--	--	272	2,440	42.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-15 (7.5-8)		5/11/2010	7.5-8	--	--	--	1,250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-16 (7.5-8)		5/11/2010	7.5-8	--	--	--	933	--	--	--	140	<85	<85	1,500	1,500	<85	340	5,800	<85	<85	<85	<85	200	
PP-4	Former UST Nest	4/28/2009	7.5-8.5	--	--	--	83.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-4		4/28/2009	14-15	--	--	--	6.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-4D		4/28/2009	14-15	--	--	--	7.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-5		4/28/2009	9-10	--	--	--	1470	--	--	7.59	3,380	<792	<792	11,600	5,350	<792	1,630	24,400	<792	<792	1,160	<792	3,360	
PP-5		4/28/2009	14-15	--	--	--	7.32	--	--	--	556	<175	<175	<175	<351	<175	<351	184	<175	<175	<175	<351	<351	
PP-6		4/28/2009	9-10	--	--	--	722	--	--	9.38	10,600	<198	<198	21,480	2,260	265	5,260	10,100	1,200	41,100	8,630	3,400	36,400	
PP-6		4/28/2009	14-15	--	--	--	8.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-7		4/28/2009	8-9	--	--	--	26.8	--	--	--	68.3	<175	<175	<175	<350	<175	<350	317	<175	<175	<175	<175	<350	
PP-7		4/28/2009	14-15	--	--	--	7.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-8		4/28/2009	7.5-8	--	--	--	198	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-9	Former UST Nest	4/28/2009	9-10	--	--	--	8.38	--	--	--	<23.5	<117	<117	<117	<235	<117	<235	<117	<117	<117	<117	<235	<235	
PP-9		4/29/2009	13.5-14	--	--	--	<5.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-10		4/28/2009	7-8	--	--	--	64.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
PP-10	Former UST Nest	4/28/2009	10.5-11.5	--	--	--	<5.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Oregon DEQ Risk Based Concentrations (RBCs)																								
Soil Ingestion, Dermal Contact, and Inhalation: Construction Worker							9,700	4,900	--	800	340,000	6,100	180,000	1,800,000	24,000,000	10,000,000	980,000	--	24,000,000	2,000,000	3,100,000	19,000,000		
Soil Ingestion, Dermal Contact, and Inhalation: Excavation Worker							>Max	>Max	--	800	9,500,000	230,000	5,000,000	44,000,000	970,000,000	250,000,000	16,000,000	--	680,000,000	54,000,000	85,000,000	540,000,000		
Soil Volatilization to Outdoor Air: Recreational							42,000	>Max	--	--	81,000	1,100	24,000	250,000	>Csat	2,400,000	83,000	--	>Csat	790,000	>Max	>Csat		

- Notes:
1. Bold values indicate that analyte concentration exceeds one or more DEQ RBC value.
 2. Method reporting limit (MRL) for 1,2-Dibromomethane and 1,2-Dichloroethane exceeds RBC for vapor intrusion into buildings.
 3. DUP = Duplicate.
 4. HCID = Hydrocarbon Identification.
 5. mg/kg (ppm) = Milligrams per kilogram (parts per million).
 6. ug/kg (ppb) = Micrograms per kilogram (parts per billion).
 7. DET = Analyte detected at or above the MRL.
 8. TPH = Total petroleum hydrocarbons.
 9. VOCs = Volatile organic compounds.
 10. RBC = Risk-Based Concentration from DEQ Risk-Based Decision Making for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011).
 11. -- = Not applicable or no RBC available.
 12. < = Analyte not detected at or above the MRL.
 13. > Max = RBC is in excess of 100,000 mg/kg. It is highly unlikely that such concentrations will ever be encountered.
 14. >Csat = RBC exceeds the limit of three-phase equilibrium partitioning.
 15. "F" = estimated value. Concentration detected above laboratory calibration.

Table A-2
TPH and Petroleum VOCs in Subsurface Soil
THPRD Farmington Road CMMF
Beaverton, Oregon

Sample ID	Area	Date	Sampling Interval	Gasoline	Diesel	Heavy Oil	TPH-G	TPH-D	TPH-Hs	Lead	Benzene	1,2-Dichloroethane	1,3-Dichloroethane	Ethylbenzene	Isopropylbenzene	Methyl tert-butyl ether	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	p-Xylene	m,p-Xylene			
				HCID			Concentrations in mg/kg (ppm)										Concentrations in ug/kg (ppb)									
PP-4	Former UST Nest	4/28/2009	7.5-8.5	--	--	--	83.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-4		4/28/2009	14-15	--	--	--	6.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-4D		4/28/2009	14-15	--	--	--	7.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-5		4/28/2009	9-10	--	--	--	1470	--	--	7.99	3,380	<792	<792	11,600	5,350	<792	1,630	24,400	<792	<792	1,160	<792	3,380			
PP-5		4/28/2009	14-15	--	--	--	7.32	--	--	--	566	<175	<175	<175	<351	<175	<351	184	<175	<175	<175	<351	<351			
PP-6		4/28/2009	9-10	--	--	--	722	--	--	9.38	10,600	<198	<198	21,400	2,280	265	5,260	10,100	1,290	41,100	8,630	3,400	36,400			
PP-6		4/28/2009	14-15	--	--	--	8.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-7		4/28/2009	8-9	--	--	--	25.8	--	--	--	66.3	<175	<175	<175	<350	<175	<350	317	<175	<175	<175	<175	<350			
PP-7		4/28/2009	14-15	--	--	--	7.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-8		4/28/2009	7.5-8	--	--	--	196	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-9	Central Site	4/28/2009	9-10	--	--	--	8.36	--	--	--	<23.5	<117	<117	<117	<235	<117	<235	<117	<117	<117	<117	<117	<235			
PP-9		4/28/2009	13.5-14	--	--	--	<5.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-10		4/28/2009	7-8	--	--	--	64.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-10		4/28/2009	10.5-11.5	--	--	--	<5.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-17 (5.5-6)		11/4/2010	5.5-6	--	--	--	<7.3	--	--	--	<37	<73	<73	<73	<73	<73	<150	<73	<73	<73	<73	<73	<150			
PP-18 (8-8.5)		11/4/2010	8.5-9	--	--	--	<9.2	<25.7	<103	--	<41	<82	<82	<82	<82	<82	<160	<82	<82	<82	<82	<82	<160			
PP-18 (5.5-8)		11/4/2010	5.5-6	--	--	--	<7.7	--	--	--	<38	<77	<77	<77	<77	<77	<150	<77	<77	<77	<77	<77	<150			
PP-12		4/28/2009	10-11.5	--	--	--	<4.83	--	--	--	<29.1	<146	<146	<146	<291	<146	<146	<146	<146	<146	<146	<146	<291			
TP-1 (5.5-6)	Former Waste Oil Tank	8/31/2010	5.5-6	--	--	--	--	1,470	4,600	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
TP-1 (5.5-6) DUP		8/31/2010	5.5-6	--	--	--	--	2,240	5,790	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
TP-1 (7.5-8)		8/31/2010	7.5-8	--	--	--	--	551	851	--	310	<81	<81	1,200	1,300	<81	2,000	4,900	190	3,000	2,900	390	540			
TP-1 (11-11.5)		8/31/2010	11-11.5	--	--	--	--	68.4	<38.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
TP-2 (5.5-6)		8/31/2010	5.5-6	--	--	--	--	1,650	5,260	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
TP-2 (9.5-10)		8/31/2010	9.5-10	--	--	--	--	221	<38.6	--	230	<89	<89	5,500	1,700	<89	321	6,000	250	180	<89	190	510			
TP-2 (10.5-11)		8/31/2010	10.5-11	--	--	--	--	35.7	<35.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-20 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	803	1,150	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-20 (7.5-8)		11/4/2010	7.5-8	--	--	--	--	534	720	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-21 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	<24.6	<98.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-21 (7.5-8)	Former Waste Oil Tank	11/4/2010	7.5-8	--	--	--	--	47.8	<108	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-22 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	38.6	<101	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-22 (7.5-8)		11/4/2010	7.5-8	--	--	--	--	292	<98.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-22 (9.5-10)		11/4/2010	9.5-10	<29.2	<65.6	<131	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-23 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	1,050	2,920	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
PP-23 (7.5-8)		11/4/2010	7.5-8	--	--	--	--	701	1,750	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PP-24 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	448	514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PP-24 (8.5-9)		11/4/2010	8.5-9	--	--	--	--	330	504	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PP-25 (5.5-6)		11/4/2010	5.5-6	--	--	--	--	30	<79.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PP-25 (7.5-8)		11/4/2010	7.5-8	--	--	--	--	97.7	<77.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
PP-11	Oregon DEQ Risk Based Concentrations (RBCs)	4/28/2009	6.5-7.5	DET	DET	DET	245	217	193	--	<76.5	<382	<382	<382	<765	<382	<765	<382	<382	<382	<382	<382	<765			
PP-11		4/28/2009	13.5-14.5	DET	DET	DET	<5.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Soil Ingestion, Dermal Contact, and Inhalation: Construction Worker							9,700	4,600	--	800	310,000	8,100	180,000	1,600,000	24,000,000	10,000,000	580,000	--	24,000,000	2,000,000	3,100,000	--	19,000,000			
Soil Ingestion, Dermal Contact, and Inhalation: Excavation Worker							>Max	>Max	--	800	9,500,000	230,000	5,000,000	44,000,000	670,000,000	290,000,000	16,000,000	--	680,000,000	54,000,000	86,000,000	--	640,000,000			
Soil Volatilization to Outdoor Air: Recreationalist							42,000	>Max	--	--	61,000	1,100	24,000	290,000	>Csat	2,400,000	63,000	--	>Csat	700,000	>Max	--	>Csat			

Notes:

1. Bold values indicates that analyte concentration exceeds one or more DEQ RBC value.
2. Method reporting limit (MRL) for 1,2-Dichloroethane and 1,3-Dichloroethane exceeds RBC for vapor intrusion into buildings.
3. DUP = Duplicate.
4. HCID = Hydrocarbon Identification.
5. mg/kg (ppm) = Milligrams per kilogram (parts per million).
6. µg/kg (ppb) = Micrograms per kilogram (parts per billion).
7. DET = Analyte detected at or above the MRL.
8. TPH = Total petroleum hydrocarbons.
9. VOCs = Volatile organic compounds.
10. RBC = Risk-Based Concentration from DEQ Risk-Based Decision Making for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011)
11. -- = Not applicable or no RBC available.
12. < = Analyte not detected at or above the MRL.
13. > Max = RBC is in excess of 100,000 mg/kg. It is highly unlikely that such concentrations will ever be encountered
14. >Csat = RBC exceeds the limit of three-phase equilibrium partitioning
15. "T" = estimated value. Concentration detected above laboratory calibration.

Table A-3
VOCs in Soil
THPRD Farmington Road CMMF
Beaverton, Oregon

Sample Number Sample Date	TP-1 (7.5-8) 8/31/2010	TP-2 (9.5-10) 8/31/2010	PP-11 (6.5-7.5) 4/28/2009	PP-12 (10-11.5) 4/28/2009	Oregon DEQ Risk Based Concentrations (RBCs)			
	Depth	7.5-8	9.5-10	6.5-7.5	10-11.5	Soil Ingestion, Dermal Contact and Inhalation: Construction Worker	Soil Ingestion, Dermal Contact and Inhalation: Excavation Worker	Soil Volatilization to Outdoor Air: Recreational
						µg/kg		
VOCs								
1,1,1,2-Tetrachloroethane	<81	<89	<382	<146	--	--	--	--
1,1,1-Trichloroethane	<81	<89	<382	<146	>Max	>Max	>Max	>Max
1,1,2,2-Tetrachloroethane	<81	<89	<382	<146	--	--	--	--
1,1,2-Trichloroethane	<81	<89	<382	<146	2.90E+05	8.10E+06	4.00E+04	4.00E+04
1,1-Dichloroethane	<81	<89	<382	<146	2.90E+06	8.10E+07	4.00E+05	4.00E+05
1,1-Dichloroethene	<81	<89	<382	<146	1.20E+07	>Max	>Csat	>Csat
1,1-Dichloropropene	<81	<89	<382	<146	--	--	--	--
1,2,3-Trichlorobenzene	<81	<89	<382	<146	--	--	--	--
1,2,3-Trichloropropene	<81	<89	<382	<146	--	--	--	--
1,2,4-Trichlorobenzene	<81	280	<382	<146	--	--	--	--
1,2,4-Trimethylbenzene	3,000	180	<382	<146	2.00E+06	5.40E+07	7.00E+05	7.00E+05
1,2-Dibromo-3-chloropropane	<160	<180	<1,910	<728	--	--	--	--
1,2-Dibromoethane (EDB)	<81	<89	<382	<146	8.10E+03	2.30E+05	1.10E+03	1.10E+03
1,2-Dichlorobenzene	<81	<89	<382	<146	1.80E+07	>Max	>Csat	>Csat
1,2-Dichloroethane	<81	<89	<382	<146	1.80E+05	5.00E+06	2.40E+04	2.40E+04
1,2-Dichloroethane (Total)	<160	<180	<382	<146	3.10E+06	8.60E+07	>Max	>Max
1,2-Dichloropropane	<81	<89	<382	<146	--	--	--	--
1,3,5-Trimethylbenzene	2,900	<89	<382	<146	1.50E+06	4.20E+07	>Csat	>Csat
1,3-Dichlorobenzene	<81	<89	<382	<146	--	--	--	--
1,3-Dichloropropane	<81	<89	<382	<146	--	--	--	--
1,4-Dichlorobenzene	<81	<89	<382	<146	1.20E+06	3.40E+07	5.80E+04	5.80E+04
2,2-Dichloropropane	<81	<89	<382	<146	--	--	--	--
2-Butanone (MEK)	<810	<890	<3,820	<1,460	--	--	--	--
2-Chlorotoluene	<81	<89	<382	<146	--	--	--	--
2-Hexanone	<810	<890	<3,820	<1,460	--	--	--	--
4-Chlorotoluene	<81	<89	<382	<146	--	--	--	--
4-Methyl-2-pentanone (MIBK)	<810	<890	<3,820	<1,460	--	--	--	--
Acetone	<810	<890	<9,560	<3,640	--	--	--	--
Benzene	310	230	<76.5	<29.1	3.40E+05	9.50E+06	8.10E+04	8.10E+04
Bromobenzene	<81	<89	<382	<146	--	--	--	--
Bromochloromethane	<81	<89	<382	<146	--	--	--	--
Bromodichloromethane	<81	<89	<382	<146	2.10E+05	5.80E+06	1.70E+04	1.70E+04
Bromofluoromethane	<81	<89	<382	<146	2.70E+06	7.60E+07	--	--
Bromomethane	<81	<89	<1,910	<728	3.30E+05	9.20E+06	5.00E+05	5.00E+05
Carbon disulfide	<81	<89	<3,820	<1,460	--	--	--	--
Carbon tetrachloride	<81	<89	<382	<146	1.50E+05	4.10E+06	4.20E+04	4.20E+04
Chlorobenzene	<81	<89	<382	<146	4.30E+06	>Max	>Csat	>Csat
Chloroethane	<81	<89	<382	<146	>Max	>Max	>Max	>Max
Chloroform	<81	<89	<382	<146	3.80E+05	1.10E+07	2.80E+04	2.80E+04
Chloromethane	<81	<89	<1,910	<728	2.50E+07	>Max	>Csat	>Csat
cis-1,2-Dichloroethane	<81	<89	<382	<146	3.10E+06	8.60E+07	>Max	>Max
cis-1,3-Dichloropropene	<81	<89	<382	<146	--	--	--	--
Dibromochloromethane	<81	<89	<1,910	<728	--	--	--	--
Dibromomethane	<81	<89	<382	<146	--	--	--	--
Dichlorodifluoromethane	<81	<89	<382	<146	--	--	--	--
Diethylbenzene	1,200	5,500	<382	<146	1.60E+06	4.40E+07	2.50E+05	2.50E+05
Hexachloro-1,3-butadiene	<160	<180	1530	<583	--	--	--	--
Isopropylbenzene (Cumene)	1,300	1,700	<765	<291	2.40E+07	>Max	>Csat	>Csat
m&p-Xylene	540	510	<765	<291	--	--	--	--
Methylene chloride	<490	<530	<1910	<728	2.70E+06	7.50E+07	1.40E+06	1.40E+06
Methyl-tert-butyl ether	<81	<89	<382	<146	1.00E+07	>Max	2.40E+06	2.40E+06
Naphthalene	2,000	1,300	<765	<291	5.80E+05	1.60E+07	4.40E+04	4.40E+04
n-Butylbenzene	2,700	3,500	<1,910	<728	--	--	--	--
n-Propylbenzene	4,900	6,000	382	<146	--	--	--	--
o-Xylene	390	190	<382	<146	--	--	--	--
p-Isopropyltoluene	330	90	<765	<291	--	--	--	--
sec-Butylbenzene	800	1,200	<382	<146	--	--	--	--
Styrene	<81	<89	<382	<146	5.10E+07	>Max	>Csat	>Csat
tert-Butylbenzene	<81	<89	<382	<146	--	--	--	--
Tetrachloroethene (PCE)	<81	<89	<382	<146	4.00E+04	1.10E+06	1.10E+05	1.10E+05
Toluene	190	250	<382	<146	2.40E+07	>Max	>Max	>Max
trans-1,2-Dichloroethane	<81	<89	<382	<146	4.50E+06	>Max	>Csat	>Csat
trans-1,3-Dichloropropene	<81	<89	<382	<146	--	--	--	--
Trichloroethene (TCE)	<81	<89	<382	<146	4.30E+04	1.20E+06	7.10E+03	7.10E+03
Trichlorofluoromethane	<81	<89	<382	<146	6.30E+07	>Max	>Csat	>Csat
Vinyl chloride	<81	<89	<382	<146	3.00E+04	8.30E+05	2.00E+04	2.00E+04
Xylene (Total)	930	710	<1,147	<437	1.90E+07	>Max	>Csat	>Csat

Notes:

1. VOCs = Volatile organic compounds
2. RBC = Risk-Based Concentration from DEQ Risk-Based Decision Making for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011)
3. < = Analyte not detected at or above the MRL
4. -- = Not applicable or no RBC available
5. µg/kg (ppb) = Micrograms per kilogram (parts per billion)
6. >MAX = RBC exceeds 100,000,000 µg/kg

Table A-4
PAHs, PCBs, and Metals in Soil
THPRD Farmington Road CMMP
Beaverton, Oregon

Sample Number Sample Date	TP-2 (5.5-6.0) 8/31/2010	TP-2 (9.5-10) 8/31/2010	TP-1 (5.5-6) 8/31/2010	Oregon DEQ Risk Based Concentrations (RBCs)		DEQ Default Background Concentrations
				Soil Ingestion, Dermal Contact and Inhalation: Construction Worker	Soil Ingestion, Dermal Contact and Inhalation: Excavation Worker	
Depth	5.5-6.0	9.5-10	5.5-6			
	milligrams per kilogram (mg/kg)					
PAHs						
1-Methylnaphthalene	3.21	--	1.43	--	--	--
2-Methylnaphthalene	6.17	--	0.717	--	--	--
Acenaphthene	0.099	0.0155	0.133	19,000	>Max	--
Acenaphthylene	0.058	<0.0090	0.0563	--	--	--
Anthracene	0.117	<0.0090	0.122	93,000	>Max	--
Benzo(a)anthracene	0.2	<0.0090	0.202	21	590	--
Benzo(a)pyrene	0.129	<0.0090	0.132	2.1	59	--
Benzo(b)fluoranthene	0.115	<0.0090	0.0998	21	590	--
Benzo(g,h,i)perylene	0.145	<0.0090	0.174	--	--	--
Benzo(k)fluoranthene	0.0935	<0.0090	0.08	210	5,900	--
Chrysene	0.137	<0.0090	0.158	2,100	59,000	--
Dibenz(a,h)anthracene	0.0196	<0.0090	0.018	2.1	59	--
Fluoranthene	0.204	<0.0090	0.189	8,900	>Max	--
Fluorene	0.192	0.0497	0.224	12,000	>Max	--
Indeno(1,2,3-cd)pyrene	0.0394	<0.0090	0.0469	21	590	--
Naphthalene	2.54	0.321	0.334	580	16,000	--
Phenanthrene	0.426	0.0759	0.497	--	--	--
Pyrene	0.481	<0.0090	0.586	6700	>Max	--
PCBs						
PCB-1016 (Aroclor 1016)	<0.022	<0.025	<0.022	--	--	--
PCB-1221 (Aroclor 1221)	<0.022	<0.025	<0.022	--	--	--
PCB-1232 (Aroclor 1232)	<0.022	<0.025	<0.022	--	--	--
PCB-1242 (Aroclor 1242)	<0.022	<0.025	<0.022	--	--	--
PCB-1248 (Aroclor 1248)	<0.022	<0.025	<0.022	--	--	--
PCB-1254 (Aroclor 1254)	<0.022	<0.025	<0.022	--	--	--
PCB-1260 (Aroclor 1260)	<0.022	<0.025	<0.022	--	--	--
Total PCB	0.154	0.175	0.154	4.4	120	--
Metals						
Arsenic	<12.3	28.1	7	13	370	7
Barium	179	121	182	60,000	--	--
Cadmium	<6.1	1.8	<6.3	150	4,300	1
Chromium	21.9	15.6	15.2	920	26,000	42
Lead	10.1	9.8	11	800	800	17
Selenium	<6.1	1.8	<6.3	--	--	--
Silver	<6.1	<0.66	<6.3	1,500	43,000	1
Mercury	<0.13	<0.12	<0.13	93	2,600	0.07

Notes:

1. Bold values indicates that analyte concentration exceeds one or more DEQ RBC value.
2. mg/kg (ppm) = Milligrams per kilogram (parts per million).
3. -- = Not Analyzed, Not Applicable, or RBC Not Available.
4. < = Not detected above the indicated method reporting limit (MRL).
5. Background concentrations from DEQ Risk Assessment Guidance (DEQ, 2010).
6. > Max = RBC is in excess of 100,000 mg/kg. The TPH RBC is greater than the maximum amount that would be present if all the initial air space was filled with petroleum product.

Table A-5

Laboratory Analytical Results: TPH, Lead, and VOCs in Groundwater and Storm Water

THPRD Farmington Road CMMMP

Beaverton, Oregon

Sample ID	Date	TPH-G	Lead	Benzene	1,2-Dibromoethane	1,2-Dichloroethane	Toluene	Ethylbenzene	Total Xylenes	Methyl tert-butyl ether	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Isopropylbenzene	n-Propylbenzene
		Concentrations in µg/L (ppb)	Concentrations in mg/L (ppm)	Concentrations in µg/L (ppb)											
Groundwater Samples															
MW-6	5/25/2010	5,410	-	10,800	<1.0	<1.0	52.3	374	248	343	245	97.2	55.6	62.5	92.9
MW-6 DUP	5/25/2010	5,390	-	11,200	<1.0	<1.0	49.6	338	215	348	184	78.6	48.8	59.1	80.7
MW-6	10/26/2010	8,200	-	13,800	<1.0	<1.0	73.2	1,560	383	318	853	142	81.2	106	239
MW-6 DUP	10/26/2010	9,400	-	13,700	<1.0	<1.0	60.6	1,570	319	351	864	118	69.9	109	228
PP-1	4/28/2009	3,290	0.787	780	<5	<5	<5	13.6	<10	<20	<20	<10	<5	49.4	120
PP-2	4/28/2009	27,700	-	1,860	<25	<25	<25	<25	<50	<100	<100	<50	<25	<100	131
PP-3	4/28/2009	7,940	-	3,600	<50	<50	<50	62	<100	601	<200	<100	<50	<200	59
PP-4	4/28/2009	14,900	-	-	-	-	-	-	-	-	-	-	-	-	-
PP-5	4/28/2009	10,700	0.938	2,260	<25	<25	<25	354	<50	<100	<100	<50	<25	<100	189
PP-6	4/28/2009	33,900	-	13,500	<100	<100	160	2,450	1,390	1,140	<400	586	136	<400	288
PP-7	4/28/2009	783	-	20.9	<0.5	<0.5	<0.5	4.48	<1.0	8.55	4.49	<1.0	0.53	5	14.7
PP-8	4/28/2009	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-
PP-9	4/28/2009	1,020	-	-	-	-	-	-	-	-	-	-	-	-	-
PP-10	4/28/2009	<80	-	<0.2	<0.5	<0.5	<0.5	0.6	<1.0	<2	<2	<1.0	<0.5	<2	<0.5
PP-11	4/28/2009	1,980	0.122	1.56	<0.5	<0.5	<0.5	10.6	<1.0	<2	3.99	4.88	4.61	20.6	45.5
PP-11D	4/28/2009	1,910	-	1.2	<0.5	<0.5	<0.5	10.1	<1.0	<2	4.7	6.17	5.85	24.1	57.6
PP-12	4/28/2009	<80	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Samples															
ST-2	5/25/2010	<50	-	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ST-2	6/21/2010	<50	-	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ST-2 DUP	6/21/2010	<50	-	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ST-2	10/26/2010	<50	-	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

1. DUP = Duplicate.
2. µg/L (ppb) = Micrograms per liter (parts per billion).
3. mg/L (ppm) = Milligrams per liter (parts per million).
4. < = Analyte not detected at or above the Method Reporting Limit (MRL).
5. TPH = Total petroleum hydrocarbons.
6. VOCs = Volatile organic compounds.
7. -- = Not analyzed.

Table A-6
 Calculation of Site-Specific RBC: Exposure Parameter Assumptions
 THPRD Farmington Road CMMP
 Beaverton, Oregon

	Default Exposure Factor ¹	Park User Exposure Factor Survey Results ²	Proposed Exposure Factor ³	Units
Exposure Frequency	175	100	125	days/year
Exposure Duration (child)	6	10	10	years
Exposure Duration (adult)	11	10	11	years
Exposure Time	24	1.5	8	hours/day
Depth to groundwater	300	--	150	cm below ground surface

Notes:

1. Default parameter for urban residential use DEQ RBDM for Petroleum-Contaminated Sites, September 22, 2003 (RBC Spreadsheet updated June, 2011).
2. Based on informal survey for proposed recreational land use completed by Metro.
3. Proposed exposure factor based on conservative assumption for exposure frequency, duration, and time. Site specific data used for depth to groundwater.

Appendix B

Soil Disposal Profile



Waste Management Profile

Requested Facility: Hillsboro Riverbend

☐ Check if there are multiple generator locations. Attach locations.

☐ Unsure Profile Number: _____

☐ Renewal? Original Profile Number: _____

A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Tualatin Hills Parks and Recreation District
2. Site Address: 13880 SW Farmington Road
(City, State, ZIP) Beaverton, Oregon 97005
3. County: Washington
4. Contact Name: Jon Campbell
5. Email: jcampbel@lhprd.org
6. Phone: 503-845-3639 7. Fax: _____
8. Generator EPA ID: _____ ☒ N/A
9. State ID: _____ ☒ N/A

C. MATERIAL INFORMATION

1. Common Name: Farmington Cleanup
Describe Process Generating Material: ☐ See Attached

Soil generated by remedial activities.
2. Material Composition and Contaminants: ☒ See Attached

1. Soil	0-100%
2. Diesel-range hydrocarbons	0-2980 mg/kg
3. Gasoline-range hydrocarbons	0-5300 mg/kg
4. Benzene	0-27 mg/kg ≥100%
3. State Waste Codes: _____ ☒ N/A
4. Color: brown
5. Physical State at 70°F: ☒ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☒ N/A (Solid)
7. pH: _____ to _____ ☒ N/A (Solid)
8. Strong Odor: ☐ Yes ☒ No Describe: Mild petroleum odor
9. Flash Point: ☐ <140°F ☐ 140°-199°F ☐ ≥200° ☒ N/A (Solid)

E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☒ Yes
Please identify applicable samples and/or lab reports:

Phase Analytical Lab Report, Phase Project Number: 253707
2. Other information attached (such as MSDS)? ☐ Yes

G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this Waste Management Profile, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.

Name (Print): Jon Campbell Date: 10/10/12
Title: Capital Project Mgt. & Support Coordinator
Company: Tualatin Hills Park & Rec. District

Certification Signature

B. BILLING INFORMATION

☐ SAME AS GENERATOR

1. Billing Name: Anderson Environmental Contracting, LLC
2. Billing Address: 705 Colorado
(City, State, ZIP) Kelso, WA 98628
3. Contact Name: Kelly Kellogg
4. Email: kellyk@aecllc.net
5. Phone: 360-577-9194 6. Fax: 360-577-9198
7. WM Hauled? ☐ Yes ☒ No
8. P.O. Number: _____

D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☒ No
Code: _____
2. State Hazardous Waste? ☐ Yes ☒ No
Code: _____
3. Excluded waste under 40 CFR 261.4 (a) or (b)? ☒ Yes* ☐ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☒ No
5. Contains benzene and subject to Benzene NESHA? ☐ Yes* ☒ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☒ No
7. CERCLA or State-mandated clean-up? ☒ Yes* ☐ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☒ No
*If Yes, see Addendum (page 2) for additional questions and space.
9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☒ No
a. Regulated by 40 CFR 761? ☐ Yes ☐ No
b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☒ No
11. Contains Asbestos? ☐ Yes: Friable ☐ Yes: Non-Friable ☒ No

F. SHIPPING AND DOT INFORMATION

1. ☒ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: _____
☐ Tons ☒ Yards ☐ Drums ☐ Gallons ☐ Other: ³⁰⁰
3. Container Type and Size: Drop box or trucks
4. USDOT Proper Shipping Name: _____ ☒ N/A

THINK GREEN®

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Last Revised March 20, 2012
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Waste Management Profile Addendum



Only complete this Addendum if prompted by responses on Waste Management Profile (page 1) or to provide additional information. Sections and question numbers correspond to Waste Management Profile.

Profile Number: _____

SECTION C

Describe Process Generating Material (Continued from page 1):

If more space is needed, please attach additional pages.

--

Material Composition and Contaminants (Continued from page 1):

If more space is needed, please attach additional pages.

5.	
6.	
7.	
8.	
9.	
10.	
≥100%	

SECTION D

Only questions with a "Yes" response on Waste Management Profile (page 1) need to be answered here.

1. EPA Hazardous Waste

a. Please list all USEPA listed and characteristic waste code numbers:

--

b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?

☐ Yes ☐ No

c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Yes, complete question 4.

☐ Yes ☐ No

d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.1084)?

☐ Yes ☐ No

→ If Yes, please select one of the following:

☐ Waste has been determined to be LDR exempt [265.1083(c)(4) and 265.1084(c)(4)] based on the fact that it meets all applicable organic treatment standards (including UHCs for D-coded characteristic wastes) or a Specified Technology has been utilized.

☐ Waste does not qualify for a LDR exemption, but the average VOC at the point of origination is <500 ppmw and this determination was based on analytical testing (upload copy of analysis) or generator knowledge.

2. State Hazardous Waste → Please list all state waste codes: _____

3. Excluded Waste → Please select which of the following categories apply to your material:

☐ Delisted Hazardous Waste

☒ Excluded Waste under 40 CFR 261.4 → Specify Exclusion: Former UST (LUST # 34 91 0083)

☐ Treated Hazardous Waste Debris

☐ Treated Characteristic Hazardous Waste → If checked, complete question 4.

4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents:

--

5. Benzene NESHAP → Please include benzene concentration and percent water/moisture in chemical composition.

a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If not, continue.

b. What is your facility's current total annual benzene quantity in Megagrams?

☐ <1 Mg ☐ 1–9.99 Mg ☐ ≥10 Mg

c. Is this waste soil from remediation at a closed facility?

☐ Yes ☐ No

d. Has material been treated to remove 99% of the benzene or to achieve <10 ppmw?

☐ Yes ☐ No

e. Is material exempt from controls in accordance with 40 CFR 61.342?

☐ Yes ☐ No

→ If yes, specify exemption: _____

f. Based on your knowledge of your waste and the BWON regulations, do you believe that this waste stream is subject to treatment and control requirements at an off-site TSDF?

☐ Yes ☐ No

6. 40 CFR 63 GGGGG → Does the material contain <500 ppw VOHAPs at the point of determination?

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up → Please submit the Record of Decision or other documentation to assist others in the evaluation for proper disposal.

8. NRC or state regulated radioactive or NORM Waste → Please identify isotopes and pCi/g: _____

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QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

Last Revised March 20, 2012
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Oregon

John A. Kitzhaber, MD, Governor

Department of Environmental Quality

Northwest Region
2020 SW 4th Ave, Suite 400
Portland, OR 97201
(503) 229-5263
FAX (503) 229-6945
TTY 711

September 19, 2012

Jon Campbell
15707 SW Walker Road
Beaverton, OR 97006-5941

Re: THPRD Former Farmington Road Texaco Remedial Action Plan, Quality Assurance Project Plan, and Health and Safety Plan – ECSI # 5546

Dear Mr. Campbell:

This letter is to inform you that DEQ has reviewed the Quality Assurance Project Plan, Health and Safety Plan, and the Remedial Action Plan for the Former Farmington Road Texaco site located at 13660 SW Farmington Road in Beaverton, Oregon. These documents were prepared by Ash Creek Associates on behalf of Tualatin Hills Park and Recreation.

DEQ hereby approves the Remedial Action Plan, dated September 19, 2012 and accepts the Quality Assurance Project Plan and Health and Safety Plan for the project.

Please contact me via email (wells-albers.rebecca@deq.state.or.us) or call, (503) 229-5585 if you have any questions.

Sincerely,

Rebecca Wells-Albers
Project Manager
DEQ Northwest Region Cleanup Program

C: John Foxwell, Ash Creek Associates (email)
Karen Homolac, Business Oregon (email)
ECSI # 5546



Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

May 26, 2010

Sam Jackson
Ash Creek Associates
3015 SW 1st Avenue
Portland, OR

RE: Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Dear Sam Jackson:

Enclosed are the analytical results for sample(s) received by the laboratory on May 13, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Samples PP-14(2.5-3) and PP13-(3-3.5) not marked for analysis. Hold samples, per client request.

Samples MW-6(3-3.25), MW-6 Dup, and MW-6(7.5-8) were received with less than one hour left of 48-hour sample-to-freeze time remaining. Affected samples analyzed from methanol-preserved vials, which do not require freezing.

Methanol-preserved vial lids were switched with DI water vial lids for several samples.

Two of three trip blank vials were received with headspace.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

REPORT OF LABORATORY ANALYSIS

Page 1 of 34

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Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

May 26, 2010
Page 2

Heidi Geri

heidi.geri@pacelabs.com
Project Manager

Enclosures

cc: Lisa Domenighini, Pace Analytical Seattle
Chris Sheridan, Ash Creek Associates

REPORT OF LABORATORY ANALYSIS

Page 2 of 34

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Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5080

CERTIFICATIONS

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Washington Certification IDs

940 South Harney Street Seattle, WA 98108
Washington Certification #: C1229
Oregon Certification #: WA200007
Alaska CS Certification #: UST-025

California Certification #: 01153CA
Alaska Drinking Water Micro Certification #: WA01230
Alaska Drinking Water VOC Certification #: WA01-09
Florida/NELAP Certification #: E87617

REPORT OF LABORATORY ANALYSIS

Page 3 of 34

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SAMPLE ANALYTE COUNT

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
253707001	MW6 - (3-3.25)	EPA 8260	LNH	18	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707002	MW6 - (3-3.25) DUP	EPA 8260	LNH	18	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707003	MW6 - (7.5-8)	EPA 8260	LNH	18	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707005	PP13 - (8-8.5)	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LNH	3	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707007	PP14 - (8-8.5)	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LNH	3	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707008	PP15 - (2-2.5)	NWTPH-Gx	LNH	3	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707009	PP15 - (7.5-8)	NWTPH-Gx	LNH	3	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707010	PP16 - (2.5-3)	NWTPH-Gx	LNH	3	PASI-S
		EPA 8260	LNH	18	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707011	PP16 - (7.5-8)	NWTPH-Gx	LNH	3	PASI-S
		EPA 8260	LNH	18	PASI-S
		ASTM D2974-87	CC	1	PASI-S
253707012	RINSATE-1	EPA 5030B/8260	LNH	18	PASI-S
253707013	TRIP BLANK	NWTPH-Gx	LNH	3	PASI-S
		EPA 5030B/8260	LNH	18	PASI-S
253707014	TRIP BLANK	NWTPH-Gx	LNH	3	PASI-S
		EPA 8260	LNH	18	PASI-S

REPORT OF LABORATORY ANALYSIS

Page 4 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Method: NWTPH-Dx
Description: NWTPH-Dx GCS SG
Client: Ash Creek Associates
Date: May 26, 2010

General Information:

2 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 5 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Method: NWTPH-Gx
Description: NWTPH-Gx GCV
Client: Ash Creek Associates
Date: May 26, 2010

General Information:

7 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with NWTPH-Gx with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: GCV/1536

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- PP16 - (2.5-3) (Lab ID: 253707010)
- 4-Bromofluorobenzene (S)

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- PP14 - (8-8.5) (Lab ID: 253707007)
- 4-Bromofluorobenzene (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 6 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Method: NWTPH-Gx
Description: NWTPH-Gx GCV
Client: Ash Creek Associates
Date: May 26, 2010

Analyte Comments:

QC Batch: GCV/1536

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- PP16 - (2.5-3) (Lab ID: 253707010)
- 4-Bromofluorobenzene (S)

General Information:

1 sample was analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: GCV/1536

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- PP16 - (2.5-3) (Lab ID: 253707010)
- 4-Bromofluorobenzene (S)

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- PP14 - (8-8.5) (Lab ID: 253707007)
- 4-Bromofluorobenzene (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

Page 7 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Method: NWTPH-Gx
Description: NWTPH-Gx GCV
Client: Ash Creek Associates
Date: May 26, 2010

Additional Comments:

Analyte Comments:

QC Batch: GCV/1536

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- PP16 - (2.5-3) (Lab ID: 253707010)
- 4-Bromofluorobenzene (S)

REPORT OF LABORATORY ANALYSIS

Page 8 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

Method: EPA 5030B/8260
Description: 8260 MSV
Client: Ash Creek Associates
Date: May 26, 2010

General Information:

2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 9 of 34

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PROJECT NARRATIVE

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

Method: EPA 8260
Description: 8260 MSV 5035A Med Level VOA
Client: Ash Creek Associates
Date: May 26, 2010

General Information:

6 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 5035A/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: MSV/2402

S5: Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

- PP16 - (2.5-3) (Lab ID: 253707010)
- 4-Bromofluorobenzene (S)
- Dibromofluoromethane (S)
- Toluene-d8 (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 10 of 34

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ANALYTICAL RESULTS

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

Sample: MW6 - (3-3.25) Lab ID: 253707001 Collected: 05/11/10 09:50 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A Med Level VOA Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	107-06-2	
1,3,5-Trimethylbenzene	0.18	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	108-67-8	
Benzene	0.20	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	71-43-2	
Ethylbenzene	0.18	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	100-41-4	
Isopropylbenzene (Cumene)	0.28	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	98-82-8	
Methyl-tert-butyl ether	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	1634-04-4	
Naphthalene	0.94	mg/kg	0.16	1	05/18/10 10:00	05/18/10 17:49	91-20-3	
Toluene	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	108-88-3	
Xylene (Total)	0.28	mg/kg	0.23	1	05/18/10 10:00	05/18/10 17:49	1330-20-7	
m&p-Xylene	0.26	mg/kg	0.16	1	05/18/10 10:00	05/18/10 17:49	179601-23-1	
n-Propylbenzene	1.1	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	103-65-1	
o-Xylene	ND	mg/kg	0.078	1	05/18/10 10:00	05/18/10 17:49	95-47-6	
Dibromofluoromethane (S)	103	%	81-114	1	05/18/10 10:00	05/18/10 17:49	1868-53-7	
Toluene-d8 (S)	106	%	84-121	1	05/18/10 10:00	05/18/10 17:49	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-127	1	05/18/10 10:00	05/18/10 17:49	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	76-115	1	05/18/10 10:00	05/18/10 17:49	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	26.5	%	0.10	1		05/18/10 10:37		

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: MW6 - (3-3.25) DUP Lab ID: 253707002 Collected: 05/11/10 09:55 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A Med Level VOA Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	107-06-2	
1,3,5-Trimethylbenzene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	108-67-8	
Benzene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	71-43-2	
Ethylbenzene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	100-41-4	
Isopropylbenzene (Cumene)	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	98-82-8	
Methyl-tert-butyl ether	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	1634-04-4	
Naphthalene	0.24	mg/kg	0.19	1	05/18/10 10:00	05/18/10 18:11	91-20-3	
Toluene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	108-88-3	
Xylene (Total)	ND	mg/kg	0.28	1	05/18/10 10:00	05/18/10 18:11	1330-20-7	
m&p-Xylene	ND	mg/kg	0.19	1	05/18/10 10:00	05/18/10 18:11	179601-23-1	
n-Propylbenzene	0.28	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	103-65-1	
o-Xylene	ND	mg/kg	0.093	1	05/18/10 10:00	05/18/10 18:11	95-47-6	
Dibromofluoromethane (S)	102	%	81-114	1	05/18/10 10:00	05/18/10 18:11	1868-53-7	
Toluene-d8 (S)	106	%	84-121	1	05/18/10 10:00	05/18/10 18:11	2037-26-5	
4-Bromofluorobenzene (S)	101	%	78-127	1	05/18/10 10:00	05/18/10 18:11	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	76-115	1	05/18/10 10:00	05/18/10 18:11	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	25.5 %	0.10	1	05/18/10 10:40
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ANALYTICAL RESULTS

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

Sample: MW6 - (7.5-8) Lab ID: 253707003 Collected: 05/11/10 10:00 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A Med Level VOA Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	15.3	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	107-06-2	
1,3,5-Trimethylbenzene	8.7	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	108-67-8	
Benzene	27.0	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	71-43-2	
Ethylbenzene	37.5	mg/kg	0.36	5	05/18/10 10:00	05/20/10 13:34	100-41-4	
Isopropylbenzene (Cumene)	4.7	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	98-82-8	
Methyl-tert-butyl ether	0.16	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	1634-04-4	
Naphthalene	16.7	mg/kg	0.15	1	05/18/10 10:00	05/18/10 18:34	91-20-3	
Toluene	0.78	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	108-88-3	
Xylene (Total)	15.9	mg/kg	0.22	1	05/18/10 10:00	05/18/10 18:34	1330-20-7	
m&p-Xylene	15.2	mg/kg	0.15	1	05/18/10 10:00	05/18/10 18:34	179601-23-1	
n-Propylbenzene	17.8	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	103-65-1	
o-Xylene	0.72	mg/kg	0.073	1	05/18/10 10:00	05/18/10 18:34	95-47-6	
Dibromofluoromethane (S)	108	%	81-114	1	05/18/10 10:00	05/18/10 18:34	1868-53-7	
Toluene-d8 (S)	121	%	84-121	1	05/18/10 10:00	05/18/10 18:34	2037-26-5	
4-Bromofluorobenzene (S)	118	%	78-127	1	05/18/10 10:00	05/18/10 18:34	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	76-115	1	05/18/10 10:00	05/18/10 18:34	17060-07-0	

Percent Moisture

Analytical Method: ASTM D2974-87

Percent Moisture	24.9	%	0.10	1	05/18/10 10:42
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ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: PP13 - (8-8.5) Lab ID: 253707005 Collected: 05/11/10 12:25 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG								
Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	2960	mg/kg	68.2	10	05/14/10 17:50	05/19/10 21:15		
Motor Oil Range SG	49.7	mg/kg	11.4	1	05/14/10 17:50	05/18/10 23:50	64742-65-0	
n-Octacosane (S) SG	94	%	50-150	1	05/14/10 17:50	05/18/10 23:50	630-02-4	
o-Terphenyl (S) SG	72	%	50-150	1	05/14/10 17:50	05/18/10 23:50	84-15-1	
NWTPH-Gx GCV								
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	995	mg/kg	81.0	10	05/14/10 08:00	05/14/10 20:05		
a,a,a-Trifluorotoluene (S)	96	%	50-150	10	05/14/10 08:00	05/14/10 20:05	98-08-8	
4-Bromofluorobenzene (S)	136	%	50-150	10	05/14/10 08:00	05/14/10 20:05	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	27.1	%	0.10	1		05/14/10 17:29		

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: PP14 - (8-8.5) Lab ID: 253707007 Collected: 05/11/10 13:00 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS SG Analytical Method: NWTPH-Dx Preparation Method: EPA 3546								
Diesel Range SG	2440	mg/kg	65.6	10	05/14/10 17:50	05/19/10 21:31		
Motor Oil Range SG	42.1	mg/kg	10.9	1	05/14/10 17:50	05/19/10 00:06	64742-65-0	
n-Octacosane (S) SG	102	%	50-150	1	05/14/10 17:50	05/19/10 00:06	630-02-4	
o-Terphenyl(S) SG	74	%	50-150	1	05/14/10 17:50	05/19/10 00:06	84-15-1	
NWTPH-Gx GCV Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	272	mg/kg	9.2	1	05/14/10 08:00	05/14/10 16:49		
a,a,a-Trifluorotoluene (S)	101	%	50-150	1	05/14/10 08:00	05/14/10 16:49	98-08-8	
4-Bromofluorobenzene (S)	169	%	50-150	1	05/14/10 08:00	05/14/10 16:49	460-00-4	S5
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	24.6	%	0.10	1		05/14/10 17:32		

ANALYTICAL RESULTS

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

Sample: PP15 - (2-2.5) Lab ID: 253707008 Collected: 05/11/10 14:30 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV								
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	ND	mg/kg	8.4	1	05/14/10 08:00	05/14/10 17:38		
a,a,a-Trifluorotoluene (S)	98 %		50-150	1	05/14/10 08:00	05/14/10 17:38	98-08-8	
4-Bromofluorobenzene (S)	92 %		50-150	1	05/14/10 08:00	05/14/10 17:38	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	23.8 %		0.10	1		05/18/10 10:44		

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: PP15 - (7.5-8) Lab ID: 253707009 Collected: 05/11/10 14:40 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV								
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	1250 mg/kg		69.2	10	05/14/10 08:00	05/14/10 20:28		
a,a,a-Trifluorotoluene (S)	97 %		50-150	10	05/14/10 08:00	05/14/10 20:28	98-08-8	
4-Bromofluorobenzene (S)	147 %		50-150	10	05/14/10 08:00	05/14/10 20:28	460-00-4	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	22.6 %		0.10	1		05/18/10 10:45		



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ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

Sample: PP16 - (2.5-3) Lab ID: 253707010 Collected: 05/11/10 12:00 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	5300	mg/kg	76.4	10	05/14/10 08:00	05/14/10 19:40		
a,a,a-Trifluorotoluene (S)	107	%	50-150	10	05/14/10 08:00	05/14/10 19:40	98-08-8	
4-Bromofluorobenzene (S)	422	%	50-150	10	05/14/10 08:00	05/14/10 19:40	460-00-4	E,S2
8260 MSV 5035A Med Level VOA Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	0.16	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	95-63-6	
1,2-Dibromoethane (EDB)	ND	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	106-93-4	
1,2-Dichloroethane	ND	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	107-06-2	
1,3,5-Trimethylbenzene	0.27	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	108-67-8	
Benzene	0.40	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	71-43-2	
Ethylbenzene	5.1	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	100-41-4	
Isopropylbenzene (Cumene)	15.3	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	98-82-8	
Methyl-tert-butyl ether	ND	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	1634-04-4	
Naphthalene	13.0	mg/kg	0.15	1	05/18/10 10:00	05/18/10 20:05	91-20-3	
Toluene	0.091	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	108-88-3	
Xylene (Total)	2.8	mg/kg	0.23	1	05/18/10 10:00	05/18/10 20:05	1330-20-7	
m&p-Xylene	2.8	mg/kg	0.15	1	05/18/10 10:00	05/18/10 20:05	179601-23-1	
n-Propylbenzene	89.0	mg/kg	1.5	20	05/18/10 10:00	05/18/10 19:20	103-65-1	
o-Xylene	ND	mg/kg	0.076	1	05/18/10 10:00	05/18/10 20:05	95-47-6	
Dibromofluoromethane (S)	115	%	81-114	1	05/18/10 10:00	05/18/10 20:05	1868-53-7	S5
Toluene-d8 (S)	140	%	84-121	1	05/18/10 10:00	05/18/10 20:05	2037-26-5	S5
4-Bromofluorobenzene (S)	134	%	78-127	1	05/18/10 10:00	05/18/10 20:05	460-00-4	S5
1,2-Dichloroethane-d4 (S)	114	%	76-115	1	05/18/10 10:00	05/18/10 20:05	17060-07-0	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	22.0	%	0.10	1		05/18/10 10:48		

ANALYTICAL RESULTS

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

Sample: PP16 - (7.5-8) Lab ID: 253707011 Collected: 05/11/10 12:05 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV								
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	933 mg/kg		85.9	10	05/14/10 08:00	05/18/10 18:09		
a,a,a-Trifluorotoluene (S)	112 %		50-150	10	05/14/10 08:00	05/18/10 18:09	98-08-8	
4-Bromofluorobenzene (S)	150 %		50-150	10	05/14/10 08:00	05/18/10 18:09	460-00-4	
8260 MSV 5035A Med Level VOA								
Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	95-63-6	
1,2-Dibromoethane (EDB)	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	106-93-4	
1,2-Dichloroethane	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	107-06-2	
1,3,5-Trimethylbenzene	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	108-67-8	
Benzene	0.14 mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	71-43-2	
Ethylbenzene	1.5 mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	100-41-4	
Isopropylbenzene (Cumene)	1.5 mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	98-82-8	
Methyl-tert-butyl ether	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	1634-04-4	
Naphthalene	0.34 mg/kg		0.17	1	05/18/10 10:00	05/18/10 19:43	91-20-3	
Toluene	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	108-88-3	
Xylene (Total)	0.26 mg/kg		0.26	1	05/18/10 10:00	05/18/10 19:43	1330-20-7	
m&p-Xylene	0.26 mg/kg		0.17	1	05/18/10 10:00	05/18/10 19:43	179601-23-1	
n-Propylbenzene	5.8 mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	103-65-1	
o-Xylene	ND mg/kg		0.086	1	05/18/10 10:00	05/18/10 19:43	95-47-6	
Dibromofluoromethane (S)	105 %		81-114	1	05/18/10 10:00	05/18/10 19:43	1868-53-7	
Toluene-d8 (S)	111 %		84-121	1	05/18/10 10:00	05/18/10 19:43	2037-26-5	
4-Bromofluorobenzene (S)	112 %		78-127	1	05/18/10 10:00	05/18/10 19:43	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		76-115	1	05/18/10 10:00	05/18/10 19:43	17060-07-0	
Percent Moisture								
Analytical Method: ASTM D2974-87								
Percent Moisture	26.8 %		0.10	1		05/18/10 10:50		

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: RINSATE-1		Lab ID: 253707012	Collected: 05/11/10 15:00	Received: 05/13/10 09:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 5030B/8260						
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		05/18/10 16:40	95-63-6	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		05/18/10 16:40	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		05/18/10 16:40	107-06-2	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		05/18/10 16:40	108-67-8	
Benzene	ND ug/L		1.0	1		05/18/10 16:40	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		05/18/10 16:40	100-41-4	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		05/18/10 16:40	98-82-8	
Methyl-tert-butyl ether	ND ug/L		1.0	1		05/18/10 16:40	1634-04-4	
Naphthalene	ND ug/L		1.0	1		05/18/10 16:40	91-20-3	
Toluene	ND ug/L		1.0	1		05/18/10 16:40	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		05/18/10 16:40	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		05/18/10 16:40	179601-23-1	
n-Propylbenzene	ND ug/L		1.0	1		05/18/10 16:40	103-65-1	
o-Xylene	ND ug/L		1.0	1		05/18/10 16:40	95-47-6	
4-Bromofluorobenzene (S)	98 %		80-120	1		05/18/10 16:40	460-00-4	
Dibromofluoromethane (S)	102 %		80-122	1		05/18/10 16:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	104 %		80-124	1		05/18/10 16:40	17060-07-0	
Toluene-d8 (S)	107 %		80-123	1		05/18/10 16:40	2037-26-5	

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: TRIP BLANK		Lab ID: 253707013	Collected: 05/11/10 09:50	Received: 05/13/10 09:10	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV		Analytical Method: NWTPH-Gx						
Gasoline Range Organics	ND ug/L		50.0	1		05/18/10 14:55		
a,a,a-Trifluorotoluene (S)	91 %		50-150	1		05/18/10 14:55	98-08-8	
4-Bromofluorobenzene (S)	94 %		50-150	1		05/18/10 14:55	460-00-4	
8260 MSV		Analytical Method: EPA 5030B/8260						
1,2,4-Trimethylbenzene	ND ug/L		1.0	1		05/18/10 14:23	95-63-6	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		05/18/10 14:23	106-93-4	
1,2-Dichloroethane	ND ug/L		1.0	1		05/18/10 14:23	107-06-2	
1,3,5-Trimethylbenzene	ND ug/L		1.0	1		05/18/10 14:23	108-67-8	
Benzene	ND ug/L		1.0	1		05/18/10 14:23	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		05/18/10 14:23	100-41-4	
Isopropylbenzene (Cumene)	ND ug/L		1.0	1		05/18/10 14:23	98-82-8	
Methyl-tert-butyl ether	ND ug/L		1.0	1		05/18/10 14:23	1634-04-4	
Naphthalene	ND ug/L		1.0	1		05/18/10 14:23	91-20-3	
Toluene	ND ug/L		1.0	1		05/18/10 14:23	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		05/18/10 14:23	1330-20-7	
m&p-Xylene	ND ug/L		2.0	1		05/18/10 14:23	179601-23-1	
n-Propylbenzene	ND ug/L		1.0	1		05/18/10 14:23	103-65-1	
o-Xylene	ND ug/L		1.0	1		05/18/10 14:23	95-47-6	
4-Bromofluorobenzene (S)	100 %		80-120	1		05/18/10 14:23	460-00-4	
Dibromofluoromethane (S)	102 %		80-122	1		05/18/10 14:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	105 %		80-124	1		05/18/10 14:23	17060-07-0	
Toluene-d8 (S)	106 %		80-123	1		05/18/10 14:23	2037-26-5	

ANALYTICAL RESULTS

Project: Metro Brownsfields Recycling

Pace Project No.: 253707

Sample: TRIP BLANK Lab ID: 253707014 Collected: 05/11/10 09:50 Received: 05/13/10 09:10 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV								
Analytical Method: NWTPH-Gx Preparation Method: NWTPH-Gx								
Gasoline Range Organics	ND	mg/kg	5.0	1	05/14/10 08:00	05/14/10 10:24		
a,a,a-Trifluorotoluene (S)	108	%	50-150	1	05/14/10 08:00	05/14/10 10:24	98-08-8	
4-Bromofluorobenzene (S)	98	%	50-150	1	05/14/10 08:00	05/14/10 10:24	460-00-4	
8260 MSV 5035A Med Level VOA								
Analytical Method: EPA 8260 Preparation Method: EPA 5035A/5030B								
1,2,4-Trimethylbenzene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	95-63-6	
1,2-Dibromoethane (EDB)	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	106-93-4	
1,2-Dichloroethane	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	107-06-2	
1,3,5-Trimethylbenzene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	108-67-8	
Benzene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	71-43-2	
Ethylbenzene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	1634-04-4	
Naphthalene	ND	ug/kg	100	1	05/20/10 10:00	05/20/10 12:03	91-20-3	
Toluene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	108-88-3	
Xylene (Total)	ND	ug/kg	150	1	05/20/10 10:00	05/20/10 12:03	1330-20-7	
m&p-Xylene	ND	ug/kg	100	1	05/20/10 10:00	05/20/10 12:03	179601-23-1	
n-Propylbenzene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	103-65-1	
o-Xylene	ND	ug/kg	50.0	1	05/20/10 10:00	05/20/10 12:03	95-47-6	
Dibromofluoromethane (S)	100	%	81-114	1	05/20/10 10:00	05/20/10 12:03	1868-53-7	
Toluene-d8 (S)	104	%	84-121	1	05/20/10 10:00	05/20/10 12:03	2037-26-5	
4-Bromofluorobenzene (S)	99	%	78-127	1	05/20/10 10:00	05/20/10 12:03	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	76-115	1	05/20/10 10:00	05/20/10 12:03	17060-07-0	

QUALITY CONTROL DATA

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

QC Batch: OEXT/2188 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3546 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 253707005, 253707007

METHOD BLANK: 27940 Matrix: Solid
Associated Lab Samples: 253707005, 253707007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range SG	mg/kg	ND	5.0	05/18/10 18:58	
Motor Oil Range SG	mg/kg	ND	8.3	05/18/10 18:58	
n-Octacosane (S) SG	%	103	50-150	05/18/10 18:58	
o-Terphenyl (S) SG	%	103	50-150	05/18/10 18:58	

LABORATORY CONTROL SAMPLE: 27941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range SG	mg/kg	167	166	99	56-124	
Motor Oil Range SG	mg/kg	167	173	104	50-150	
n-Octacosane (S) SG	%			105	50-150	
o-Terphenyl (S) SG	%			95	50-150	

SAMPLE DUPLICATE: 27942

Parameter	Units	253704002 Result	Dup Result	RPD	Qualifiers
Diesel Range SG	mg/kg	ND	ND		
Motor Oil Range SG	mg/kg	ND	ND		
n-Octacosane (S) SG	%	114	113	.6	
o-Terphenyl (S) SG	%	111	113	3	

QUALITY CONTROL DATA

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

QC Batch: GCV/1536 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV
Associated Lab Samples: 253707005, 253707007, 253707008, 253707009, 253707010, 253707014

METHOD BLANK: 27866 Matrix: Solid
Associated Lab Samples: 253707005, 253707007, 253707008, 253707009, 253707010, 253707014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.0	05/14/10 09:16	
4-Bromofluorobenzene (S)	%	111	50-150	05/14/10 09:16	
a,a,a-Trifluorotoluene (S)	%	116	50-150	05/14/10 09:16	

LABORATORY CONTROL SAMPLE: 27867

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	12.5	13.1	105	54-156	
4-Bromofluorobenzene (S)	%			106	50-150	
a,a,a-Trifluorotoluene (S)	%			118	50-150	

SAMPLE DUPLICATE: 27998

Parameter	Units	253704002 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	1.1J		
4-Bromofluorobenzene (S)	%	104	102	2	
a,a,a-Trifluorotoluene (S)	%	112	109	3	

SAMPLE DUPLICATE: 27999

Parameter	Units	253704015 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	ND	.95J		
4-Bromofluorobenzene (S)	%	98	93	5	
a,a,a-Trifluorotoluene (S)	%	106	105	.7	

QUALITY CONTROL DATA

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

QC Batch: GCV/1544 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx Solid GCV
Associated Lab Samples: 253707011

METHOD BLANK: 28176 Matrix: Solid
Associated Lab Samples: 253707011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.0	05/18/10 13:19	
4-Bromofluorobenzene (S)	%	102	50-150	05/18/10 13:19	
a,a,a-Trifluorotoluene (S)	%	106	50-150	05/18/10 13:19	

LABORATORY CONTROL SAMPLE: 28177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	12.5	11.4	92	54-156	
4-Bromofluorobenzene (S)	%			103	50-150	
a,a,a-Trifluorotoluene (S)	%			98	50-150	

SAMPLE DUPLICATE: 28178

Parameter	Units	253707011 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	mg/kg	933	883	5	
4-Bromofluorobenzene (S)	%	150	143	5	
a,a,a-Trifluorotoluene (S)	%	112	108	4	

QUALITY CONTROL DATA

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

QC Batch: GCV/1540 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 253707013

METHOD BLANK: 28028 Matrix: Water

Associated Lab Samples: 253707013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	ND	50.0	05/18/10 12:30	
4-Bromofluorobenzene (S)	%	100	50-150	05/18/10 12:30	
a,a,a-Trifluorotoluene (S)	%	102	50-150	05/18/10 12:30	

LABORATORY CONTROL SAMPLE: 28029

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	239	96	50-163	
4-Bromofluorobenzene (S)	%			99	50-150	
a,a,a-Trifluorotoluene (S)	%			102	50-150	

SAMPLE DUPLICATE: 28175

Parameter	Units	253740001 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	ug/L	23900	22600	5	
4-Bromofluorobenzene (S)	%	116	95	20	
a,a,a-Trifluorotoluene (S)	%	113	101	11	

QUALITY CONTROL DATA

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

QC Batch: MSV/2401

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 253707012, 253707013

METHOD BLANK: 28009

Matrix: Water

Associated Lab Samples: 253707012, 253707013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	ND	1.0	05/18/10 13:14	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	05/18/10 13:14	
1,2-Dichloroethane	ug/L	ND	1.0	05/18/10 13:14	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	05/18/10 13:14	
Benzene	ug/L	ND	1.0	05/18/10 13:14	
Ethylbenzene	ug/L	ND	1.0	05/18/10 13:14	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	05/18/10 13:14	
m&p-Xylene	ug/L	ND	2.0	05/18/10 13:14	
Methyl-tert-butyl ether	ug/L	ND	1.0	05/18/10 13:14	
n-Propylbenzene	ug/L	ND	1.0	05/18/10 13:14	
Naphthalene	ug/L	ND	1.0	05/18/10 13:14	
o-Xylene	ug/L	ND	1.0	05/18/10 13:14	
Toluene	ug/L	ND	1.0	05/18/10 13:14	
Xylene (Total)	ug/L	ND	3.0	05/18/10 13:14	
1,2-Dichloroethane-d4 (S)	%	106	80-124	05/18/10 13:14	
4-Bromofluorobenzene (S)	%	99	80-120	05/18/10 13:14	
Dibromofluoromethane (S)	%	103	80-122	05/18/10 13:14	
Toluene-d8 (S)	%	105	80-123	05/18/10 13:14	

LABORATORY CONTROL SAMPLE: 28010

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	20.4	102	72-126	
1,2-Dibromoethane (EDB)	ug/L	20	19.6	98	78-117	
1,2-Dichloroethane	ug/L	20	20.2	101	73-127	
1,3,5-Trimethylbenzene	ug/L	20	20.6	103	68-129	
Benzene	ug/L	20	20.3	102	75-124	
Ethylbenzene	ug/L	20	20.3	101	76-124	
Isopropylbenzene (Cumene)	ug/L	20	20.6	103	73-127	
m&p-Xylene	ug/L	40	41.3	103	75-124	
Methyl-tert-butyl ether	ug/L	20	20.4	102	72-130	
n-Propylbenzene	ug/L	20	20.1	100	69-129	
Naphthalene	ug/L	20	20.7	103	69-135	
o-Xylene	ug/L	20	20.7	104	76-121	
Toluene	ug/L	20	20.0	100	75-124	
Xylene (Total)	ug/L	60	62.0	103	76-123	
1,2-Dichloroethane-d4 (S)	%			106	80-124	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			104	80-122	
Toluene-d8 (S)	%			104	80-123	

Date: 05/26/2010 01:17 PM

REPORT OF LABORATORY ANALYSIS

Page 27 of 34

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QUALITY CONTROL DATA

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 28011 28012											
Parameter	Units	253721004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,2,4-Trimethylbenzene	ug/L	ND	20	20	21.8	23.2	109	116	72-126	6	
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	19.9	21.1	99	105	78-117	6	
1,2-Dichloroethane	ug/L	ND	20	20	20.6	21.8	103	109	73-127	6	
1,3,5-Trimethylbenzene	ug/L	ND	20	20	22.1	23.5	111	118	68-129	6	
Benzene	ug/L	ND	20	20	21.7	23.0	109	115	75-124	6	
Ethylbenzene	ug/L	ND	20	20	21.9	23.6	110	118	76-124	7	
Isopropylbenzene (Cumene)	ug/L	ND	20	20	22.6	23.9	113	119	73-127	5	
m&p-Xylene	ug/L	ND	40	40	45.0	47.6	112	119	75-124	6	
Methyl-tert-butyl ether	ug/L	ND	20	20	21.9	22.7	105	109	72-130	3	
n-Propylbenzene	ug/L	ND	20	20	21.8	23.3	109	117	69-129	7	
Naphthalene	ug/L	ND	20	20	21.4	21.7	107	108	69-135	1	
o-Xylene	ug/L	ND	20	20	22.4	23.8	112	119	76-121	6	
Toluene	ug/L	ND	20	20	21.5	22.8	108	114	75-124	6	
Xylene (Total)	ug/L	ND	60	60	67.4	71.4	112	119	76-123	6	
1,2-Dichloroethane-d4 (S)	%						106	104	80-124		
4-Bromofluorobenzene (S)	%						101	102	80-120		
Dibromofluoromethane (S)	%						106	105	80-122		
Toluene-d8 (S)	%						105	106	80-123		

QUALITY CONTROL DATA

Project: Metro Brownsfilds Recycling
Pace Project No.: 253707

QC Batch: MSV/2402 Analysis Method: EPA 8260
QC Batch Method: EPA 5035A/5030B Analysis Description: 8260 MSV 5035A Medium Soil
Associated Lab Samples: 253707001, 253707002, 253707003, 253707010, 253707011

METHOD BLANK: 28013 Matrix: Solid
Associated Lab Samples: 253707001, 253707002, 253707003, 253707010, 253707011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	ND	0.050	05/18/10 13:38	
1,2-Dibromoethane (EDB)	mg/kg	ND	0.050	05/18/10 13:38	
1,2-Dichloroethane	mg/kg	ND	0.050	05/18/10 13:38	
1,3,5-Trimethylbenzene	mg/kg	ND	0.050	05/18/10 13:38	
Benzene	mg/kg	ND	0.050	05/18/10 13:38	
Ethylbenzene	mg/kg	ND	0.050	05/18/10 13:38	
Isopropylbenzene (Cumene)	mg/kg	ND	0.050	05/18/10 13:38	
m&p-Xylene	mg/kg	ND	0.10	05/18/10 13:38	
Methyl-tert-butyl ether	mg/kg	ND	0.050	05/18/10 13:38	
n-Propylbenzene	mg/kg	ND	0.050	05/18/10 13:38	
Naphthalene	mg/kg	ND	0.10	05/18/10 13:38	
o-Xylene	mg/kg	ND	0.050	05/18/10 13:38	
Toluene	mg/kg	ND	0.050	05/18/10 13:38	
Xylene (Total)	mg/kg	ND	0.15	05/18/10 13:38	
1,2-Dichloroethane-d4 (S)	%	104	76-115	05/18/10 13:38	
4-Bromofluorobenzene (S)	%	98	78-127	05/18/10 13:38	
Dibromofluoromethane (S)	%	101	81-114	05/18/10 13:38	
Toluene-d8 (S)	%	106	84-121	05/18/10 13:38	

LABORATORY CONTROL SAMPLE & LCSD: 28014			28015							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	mg/kg	1	1.1	1.0	106	101	75-133	4	30	
1,2-Dibromoethane (EDB)	mg/kg	1	1.0	0.97	101	97	68-119	5	30	
1,2-Dichloroethane	mg/kg	1	1.0	0.97	102	97	67-127	6	30	
1,3,5-Trimethylbenzene	mg/kg	1	1.1	1.0	106	103	77-131	3	30	
Benzene	mg/kg	1	1.0	1.0	105	101	79-127	3	30	
Ethylbenzene	mg/kg	1	1.1	1.0	106	101	77-126	5	30	
Isopropylbenzene (Cumene)	mg/kg	1	1.1	1.0	108	104	80-127	4	30	
m&p-Xylene	mg/kg	2	2.2	2.1	109	104	78-120	4	30	
Methyl-tert-butyl ether	mg/kg	1	1.0	0.99	104	99	60-140	4	30	
n-Propylbenzene	mg/kg	1	1.0	1.0	103	100	78-134	3	30	
Naphthalene	mg/kg	1	1.1	1.0	107	102	40-125	4	30	
o-Xylene	mg/kg	1	1.1	1.0	110	104	76-123	6	30	
Toluene	mg/kg	1	1.0	0.99	104	99	77-124	5	30	
Xylene (Total)	mg/kg	3	3.3	3.1	109	104	77-127	5	30	
1,2-Dichloroethane-d4 (S)	%				106	105	76-115			
4-Bromofluorobenzene (S)	%				103	104	78-127			
Dibromofluoromethane (S)	%				106	105	81-114			
Toluene-d8 (S)	%				106	103	84-121			

Date: 05/26/2010 01:17 PM

REPORT OF LABORATORY ANALYSIS

Page 29 of 34

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QUALITY CONTROL DATA

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

QC Batch:	MSV/2412	Analysis Method:	EPA 8260
QC Batch Method:	EPA 5035A/5030B	Analysis Description:	8260 MSV 5035A Medium Soil
Associated Lab Samples:	253707014		

METHOD BLANK: 28210 Matrix: Solid
Associated Lab Samples: 253707014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	50.0	05/20/10 11:40	
1,2-Dibromoethane (EDB)	ug/kg	ND	50.0	05/20/10 11:40	
1,2-Dichloroethane	ug/kg	ND	50.0	05/20/10 11:40	
1,3,5-Trimethylbenzene	ug/kg	ND	50.0	05/20/10 11:40	
Benzene	ug/kg	ND	50.0	05/20/10 11:40	
Ethylbenzene	ug/kg	ND	50.0	05/20/10 11:40	
Isopropylbenzene (Cumene)	ug/kg	ND	50.0	05/20/10 11:40	
m&p-Xylene	ug/kg	ND	100	05/20/10 11:40	
Methyl-tert-butyl ether	ug/kg	ND	50.0	05/20/10 11:40	
n-Propylbenzene	ug/kg	ND	50.0	05/20/10 11:40	
Naphthalene	ug/kg	ND	100	05/20/10 11:40	
o-Xylene	ug/kg	ND	50.0	05/20/10 11:40	
Toluene	ug/kg	ND	50.0	05/20/10 11:40	
Xylene (Total)	ug/kg	ND	150	05/20/10 11:40	
1,2-Dichloroethane-d4 (S)	%	105	76-115	05/20/10 11:40	
4-Bromofluorobenzene (S)	%	97	78-127	05/20/10 11:40	
Dibromofluoromethane (S)	%	102	81-114	05/20/10 11:40	
Toluene-d8 (S)	%	105	84-121	05/20/10 11:40	

LABORATORY CONTROL SAMPLE & LCSD: 28211			28212							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	984	969	98	97	75-133	2	30	
1,2-Dibromoethane (EDB)	ug/kg	1000	971	955	97	96	68-119	2	30	
1,2-Dichloroethane	ug/kg	1000	989	976	99	98	67-127	1	30	
1,3,5-Trimethylbenzene	ug/kg	1000	983	971	98	97	77-131	1	30	
Benzene	ug/kg	1000	1000	964	100	96	79-127	4	30	
Ethylbenzene	ug/kg	1000	978	960	98	96	77-126	2	30	
Isopropylbenzene (Cumene)	ug/kg	1000	1000	981	100	98	80-127	2	30	
m&p-Xylene	ug/kg	2000	2000	1960	100	98	78-120	2	30	
Methyl-tert-butyl ether	ug/kg	1000	1030	1000	103	100	60-140	2	30	
n-Propylbenzene	ug/kg	1000	958	953	96	95	78-134	.5	30	
Naphthalene	ug/kg	1000	1030	1010	103	101	40-125	2	30	
o-Xylene	ug/kg	1000	1010	993	101	99	76-123	2	30	
Toluene	ug/kg	1000	962	937	96	94	77-124	3	30	
Xylene (Total)	ug/kg	3000	3010	2960	100	99	77-127	2	30	
1,2-Dichloroethane-d4 (S)	%				104	104	76-115			
4-Bromofluorobenzene (S)	%				102	102	78-127			
Dibromofluoromethane (S)	%				107	103	81-114			
Toluene-d8 (S)	%				104	105	84-121			

Date: 05/26/2010 01:17 PM

REPORT OF LABORATORY ANALYSIS

Page 30 of 34

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QUALITY CONTROL DATA

Project: Metro Brownsfilds Recycling

Pace Project No.: 253707

QC Batch: PMST/1213

Analysis Method: ASTM D2974-87

QC Batch Method: ASTM D2974-87

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 253707005, 253707007

SAMPLE DUPLICATE: 27946

Parameter	Units	253704002 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	3.0	2.8	6	

SAMPLE DUPLICATE: 27947

Parameter	Units	253704015 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	9.6	9.6	.5	

QUALITY CONTROL DATA

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

QC Batch: PMST/1214 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 253707001, 253707002, 253707003, 253707008, 253707009, 253707010, 253707011

SAMPLE DUPLICATE: 28003

Parameter	Units	253707001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	26.5	27.0	2	

SAMPLE DUPLICATE: 28004

Parameter	Units	253713009 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	4.9	5.3	9	

QUALIFIERS

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-S Pace Analytical Services - Seattle

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

S5 Surrogate recovery outside control limits due to matrix interferences (not confirmed by re-analysis).

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Metro Brownsfields Recycling
Pace Project No.: 253707

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
253707005	PP13 - (8-8.5)	EPA 3546	OEXT/2188	NWTPH-Dx	GCSV/1617
253707007	PP14 - (8-8.5)	EPA 3546	OEXT/2188	NWTPH-Dx	GCSV/1617
253707005	PP13 - (8-8.5)	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707007	PP14 - (8-8.5)	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707008	PP15 - (2-2.5)	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707009	PP15 - (7.5-8)	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707010	PP16 - (2.5-3)	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707011	PP16 - (7.5-8)	NWTPH-Gx	GCV/1544	NWTPH-Gx	GCV/1545
253707014	TRIP BLANK	NWTPH-Gx	GCV/1536	NWTPH-Gx	GCV/1542
253707013	TRIP BLANK	NWTPH-Gx	GCV/1540		
253707012	RINSATE-1	EPA 5030B/8260	MSV/2401		
253707013	TRIP BLANK	EPA 5030B/8260	MSV/2401		
253707001	MW6 - (3-3.25)	EPA 5035A/5030B	MSV/2402	EPA 8260	MSV/2409
253707002	MW6 - (3-3.25) DUP	EPA 5035A/5030B	MSV/2402	EPA 8260	MSV/2409
253707003	MW6 - (7.5-8)	EPA 5035A/5030B	MSV/2402	EPA 8260	MSV/2409
253707010	PP16 - (2.5-3)	EPA 5035A/5030B	MSV/2402	EPA 8260	MSV/2409
253707011	PP16 - (7.5-8)	EPA 5035A/5030B	MSV/2402	EPA 8260	MSV/2409
253707014	TRIP BLANK	EPA 5035A/5030B	MSV/2412	EPA 8260	MSV/2418
253707001	MW6 - (3-3.25)	ASTM D2974-87	PMST/1214		
253707002	MW6 - (3-3.25) DUP	ASTM D2974-87	PMST/1214		
253707003	MW6 - (7.5-8)	ASTM D2974-87	PMST/1214		
253707005	PP13 - (8-8.5)	ASTM D2974-87	PMST/1213		
253707007	PP14 - (8-8.5)	ASTM D2974-87	PMST/1213		
253707008	PP15 - (2-2.5)	ASTM D2974-87	PMST/1214		
253707009	PP15 - (7.5-8)	ASTM D2974-87	PMST/1214		
253707010	PP16 - (2.5-3)	ASTM D2974-87	PMST/1214		
253707011	PP16 - (7.5-8)	ASTM D2974-87	PMST/1214		